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No. 8587

IN THE

SUPREME COURT

OF THE

STATE OF CALIFORNIA.

CHARLES LUX ET AL.,

Appellants,

vs.

JAMES B. HAGGIN ET AL.,

Respondents.

TRANSCRIPT ON APPEAL.

Volume 5.

STETSON & HOUGHTON,
Attorneys for Appellants.

LOUIS T. HAGGIN,
Attorney for Respondents.

Filed Aug 22 *1882.*

F. W. Gross *Clerk,*

By B Harlan *Deputy.*

PLAINTIFFS' CASE IN REBUTTAL.

INDEX.

		Page	Folio
Affidavit of Seth Smith		132	524
" " Geo. W. Smith		133	529
" " Hall McAllister		134	535
" " F. P. McCray		136	541
" " E. T. Wright		137	546
" " R. T. Harrold		139	553
Assignment of Errors		204	814
Testimony of—			
Barker, Nellie A.	direct	60	236
Brower, C.	direct	98	388
Crocker, E. M.	direct	63	249
	cross	64	252
Dixon, L. L.	direct	56	220
	do	105	417
	cross	124	494
	irrigation statistics	109	432
		to	
		121	483
Estee, W. P.	direct	46	181
Exhibits (Plaintiffs')—			
41		22	84
42		34	134
Map B		40	156
43		65	259
to		to	
72		97	387
100		166	663
Findings		167	665
do No. 11, amended		203	809
Testimony of—			
Harrold, R. T.	direcct	43	168
	cross	45	176
	affidavit of	139	553
Judd, S. M	direct	62	244
McAllister, Hall	affidavit of	134	535
McCray, F. P.	direct	32	125
	cross	42	165
	direct	148	590
	cross	150	596
	re-direct	160	637
	affidavit of	136	541
Macmurdo, W. R.	field notes	13	48

Testimony of—		Page	Folio
Martin, John	direct	62	246
Schuyler, J. D	direct	102	406
	cross	104	413
Smith, Geo	direct	127	506
	cross	129	514
Smith, Geo. W	direct	1	1
	cross	21	81
	affidavit of	133	529
	direct	161	641
	cross	162	646
	re-direct	166	662
	notes of survey	5	17
Smith, Seth	direct	29	113
	cross	31	123
	direct	141	560
	cross	143	570
	re-direct	148	588
	re-cross	148	589
Stine, Philip A	direct	99	393
	cross	100	399
Wible, S. W	direct	49	192
	cross	51	203
Wills, Thos. N	direct	52	206
	cross	55	216
Wright, E. T	direct	22	85
	cross	24	95
	notes of survey	25	96
	affidavit of	137	546

In the Superior Court of the County of Kern, State of California.

CHARLES LUX AND AL.

v.

1 JAMES B. HAGGIN AND AL.

Plaintiffs' Bill of Exceptions on Appeal, and also on Motion for a New Trial.

VOLUME IV.

2

TUESDAY, May 31, 1881.

TESTIMONY IN REBUTTAL.

GEORGE W. SMITH,

Being called as witness for plaintiffs, and sworn, testified as follows :

I am a surveyor. I reside in Visalia ; have resided 3 there for seventeen or eighteen years. I was County Surveyor of that county for four years, deputy County Surveyor for two or three years, and under Sheriff two years.

By Mr. HOUGHTON—Q—Have you ever run any levels across the body of swamp lands that lie between Buena Vista and Tulare Lakes, in Kern County ?

Mr. FLOURNOY—We object. What is the object of the testimony.

Mr. HOUGHTON—To contradict your evidence in this case.

4 Mr. McAllister—This is what we want to show by Mr. Smith; that he ran a level beginning at the stake which was driven by Mr. Fillebrown and McMurdo, across the swamp in the same direction that they ran it, and he made a profile covering that level, which differs materially from the level run by McMurdo and Fillebrown. That is the precise point to which this witness' testimony goes.

Mr. Garber—If this is confined to the profile made exactly where our profile was made, then I think it is in the discretion of the Court, for the purpose of proving that our profile is incorrect; not for the pur-
5 pose of proving a channel.

The Court—For that purpose only. If it is just simply for proving the incorrectness of the profile, introduced on the part of the defendants here, the discretion of the Court will be exercised in behalf of the plaintiffs in that respect, and the Court will permit them to do it. I wish to have it confined to that. There has been a mass of testimony upon these channels.

A—Yes, sir. I ran a line of levels. I commenced that work a week ago last Saturday.

Q—In running those levels, where did you com-
6 mence?

A—I commenced at a point near the house occupied by Mr. Harrold, which was shown to me by Mr. Harrold as being the place that some one else had started a line. I started from that point and from that stake.

[The witness produces a book and is looking at it.]

By Mr. Haggin—Q—What is that book you are looking at?

A—My notes, sir; field notes of the survey.

Q—When were those notes made?

A—On the ground—part of them at that time and
7 part when we returned. Part of them were made on Saturday when we returned, and took the actual course and distance by the instrument to that house.

By Mr. Houghton—Q—State what you did the first time you went to run this line of levels?

A—We started about three hundred feet from Harrold's house, at that stake. I run west two hundred and six one hundred foot stations.

Q—In running that, what was the nature of the country through which you ran the two hundred and six stations?

Objected to by defendant as not being rebuttal.

The objection is sustained, and plaintiffs except.

Q—You say you ran two hundred and six stations the first day west?

A—Yes, sir.

Q—Was there anything along that line to indicate that any one had been over the line before?

A—Yes, sir; the tules were broken down, and a wagon had gone along there.

Q—How were they broken down?

A—It seemed to be by some instrument that dragged them down.

Q—Did you follow along that line where those tules were broken in that manner?

A—Yes, sir.

Q—The whole distance to that point?

A—Yes, sir.

Q—In making this survey, where did you commence?

A—Commenced at the stake, and ran to Station 206. There we varied our course, and ran to a stake marked "One Quarter S," said to be the center of Section 12, in Township 29, Range 22. I do not know of my own knowledge that it was a quarter-section stake that was there. I know that it was a stake that was marked "One Quarter S." Mr. McCray accompanied me on that survey—Mr. Wright, of Los Angeles, and my brother, all four of us. In making that survey we ran two lines—two independent and separate lines. Our turning points were generally the same, but the lines run by each two of us were run alone. My brother ran the line with me. He was rod-man, and I used the level. We took elevations, in running across there, every hundred feet. We measured those 100 feet by a chain. I don't remember what those elevations were. I have the notes of them with me that were made at the time, and they are correct. I have compared those notes with a profile made by Mr. Wright.

Q—Is that the profile that you compared them with (showing a profile)?

A—Yes, sir, Mr. Wright was running levels with us at the time, but not on the same line. There was a difference of some inches at some of the intermediate stations between Mr. Wright's notes and my own. The greatest difference at any hundred-foot station was not a tenth. I believe, as near as I can remember, a tenth of a foot; but at the intermediate station, owing

12 to the ground being irregular and rooted up by hogs, there might have been two or three inches. We were running those lines one on one side of the track and the other on the other—one on each side of the drag-line. It would be, perhaps, six feet apart. We were running right along together, one rod-man was right behind the other—a station behind, may be. I have with me the notes of the elevations of the hundred-foot stations. [The plaintiff now offers in evidence the profile referred to.] This profile accurately expresses my survey and levels. I have examined it. It exactly expresses the line ran by Mr. McCray and Mr.
13 Wright. A slight variance occurs occasionally between their line and ours. It expresses the line that I actually ran, and what my notes show as to the elevations.

Q—Now let me ask you, in running a profile of this kind, whether it is usual, if you meet with a slough, to express it on the profile?

[Objected to by defendant as not being rebuttal. The objection is sustained, and the plaintiffs except.]

Q—This profile expresses the elevation, as I understand, on the profile itself?

A—Yes, sir; this profile is made in accordance with Mr. Wright's survey, and I have compared it with my
14 notes, and it agrees with them very nearly. There is a slight difference, the usual difference. Of course, there are no two sets of surveyors that will agree exactly, to a hundredth. There is a slight difference at the different stations.

Q—You say you have in that book the elevations at each station run by you in running those levels across that place?

A—Yes, sir.

Q—Will you give them?—what was the assumed elevation at the stake where you started?

A—One hundred.

15 Mr. HAGGIN—(After examining the witness' note-book)—Do you propose to read this?

Mr. HOUGHTON—Yes, sir.

The WITNESS—We measured those stations with a chain, and each of them are a hundred feet apart. The note, in connection with the starting point, is: "Running across Buena Vista swamp, from a point near "Harold's house, which is about the quarter section "corner of Sections 10 and 11, 29-23. Starting place "about 300 feet south of Harold's house, running west;

16 "variation, $15\frac{1}{4}$ east." We made that note the first time we run.

Q—Go on, and give us the notes of the elevation at the stations.

A—Zero is 100; Station 1, 99.89.

Q—You need not call off the station. Each station is one hundred feet apart?

A—No; there is "plus" on the line.

Q—What do you mean?

A—That is, not one hundred feet.

Q—What do you mean by "plus"—intermediate?

A—Yes, sir; between the one hundred feet, where
17 there are depressions or elevations.

Q—Give us only your stations and elevations?

A—Station zero, 100.

Station	1,	Elevation	99.89	Station	32,	Elevation	98.38
"	2,	"	99.96	"	33,	"	98.54
"	3,	"	100.22	"	34,	"	98.74
"	4,	"	98.94	"	35,	"	98.46
"	5,	"	99.15	"	36,	"	98.23
"	6,	"	99.24	"	37,	"	97.86
"	7,	"	99.20	"	38,	"	97.94
"	8,	"	100.25	"	39,	"	97.49
18 "	9,	"	99.17	"	40,	"	97.60
"	10,	"	98.84	"	41,	"	97.34
"	11,	"	98.64	"	42,	"	97.40
"	12,	"	98.95	"	43,	"	97.60
"	13,	"	98.50	"	44,	"	97.54
"	14,	"	98.61	"	45,	"	97.66
"	15,	"	98.43	"	46,	"	97.41
"	16,	"	98.43	"	47,	"	97.14
"	17,	"	98.21	"	48,	"	96.39
"	18,	"	98.09	"	49,	"	96.91
"	19,	"	98.47	"	50,	"	97.07
"	20,	"	98.33	"	51,	"	97.15
19 "	21,	"	98.55	"	52,	"	97.05
"	22,	"	98.42	"	53,	"	96.93
"	23,	"	98.92	"	54,	"	96.90
"	24,	"	98.69	"	55,	"	96.72
"	25,	"	98.70	"	56,	"	96.76
"	26,	"	98.38	"	57,	"	96.87
"	27,	"	98.49	"	58,	"	96.65
"	28,	"	98.43	"	59,	"	96.50
"	29,	"	98.06	"	60,	"	96.08
"	30,	"	98.11	"	61,	"	96.73
"	31,	"	98.41	"	62,	"	96.83

20

Station 63,	Elevation	96.51	Station 69,	Elevation	97.56
" 64,	"	96.58	" 69+50,	"	97.32
" 65,	"	96.42	" 70,	"	96.04
" 66,	"	96,74	" 70+50,	"	96.92
" 67,	"	96.69	" 70+66,	"	97.46
" 68,	"	97.32	" 71,	"	97.73

The WITNESS—Do you want the cross sections of these sloughs?

Mr. HAGGIN—Never mind the sloughs.

Mr. HOUGHTON—Only your elevations, along there.

Q—Give us the elevations along there; that is, be-
21 tween station 71 and 72. What are the elevations on the side line?

A—72 on the side line.

Q—What are the stations or elevations between 71 and 72; anything?

A—Not on the direct line, there are cross sections up above and below.

The COURT—Read the stations right along.

A—

Station 72,	Elevation	97.41	Station 97,	Elevation	95.73
" 73,	"	97.34	" 98,	"	95.62
" 74,	"	97.09	" 99,	"	95.82
22 " 75,	"	97.08	" 100,	"	95.61
" 76,	"	96.96	" 101,	"	95.15
" 77,	"	96.89	" 102,	"	94.83
" 78,	"	96.91	" 103,	"	94.75
" 79,	"	97.13	" 104,	"	94.21
" 80,	"	96.79	" 105,	"	94.44
" 81,	"	96.73	" 106,	"	94.44
" 82,	"	96.45	" 107,	"	94.66
" 83,	"	96.73	" 108,	"	94.50
" 84,	"	96.51	" 109,	"	94.50
" 85,	"	96.53	" 110,	"	94.28
" 86,	"	96.30	" 110+60,	"	93.77
23 " 87,	"	96.94	" 110+70,	"	92.73
" 88,	"	97.16	" 111,	"	93.98
" 89,	"	96.84	" 112,	"	94.11
" 90,	"	96.04	" 113,	"	94.04
" 91,	"	95.94	" 114,	"	93.93
" 92,	"	95.79	" 115,	"	94.60
" 93,	"	95.64	" 116,	"	94.08
" 94,	"	95.75	" 117,	"	93.90
" 95,	"	95.78	" 117+80,	"	93.59
" 96,	"	95.70	" 118,	"	92.86

24	Station	118+20,	Elev'n	91.30	Station	157,	Elevation 92.28
	"	118+40,	"	92.55	"	158,	" 92.65
	"	118+60,	"	93.37	"	159,	" 92.52
	"	119,	"	93.69	"	160,	" 92.67
	"	120,	"	93.61	"	161,	" 92.30
	"	121,	"	93.90	"	162,	" 92.72
	"	122,	"	94.06	"	163,	" 92.47
	"	123,	"	94.33	"	164,	" 92.68
	"	124,	"	94.45	"	165,	" 92.34
	"	125,	"	94.41	"	166,	" 92.26
	"	126,	"	94.21	"	167,	" 92.26
	"	127,	"	94.18	"	168,	" 92.36
25	"	128,	"	94.04	"	169,	" 92.14
	"	129,	"	93.82	"	169+50,	" 91.56
	"	130,	"	93.46	"	170,	" 90.68
	"	131,	"	92.91	"	170+35,	" 89.86
	"	131+50,	"	91,63	"	170+60,	" 90.75
	"	131+90,	"	91.43	"	171,	" 91.91
	"	132,	"	89.56	"	172,	" 92.03
	"	132+7,	"	89.28	"	173,	" 91.97
	"	132+20,	"	89.83	"	174,	" 92.44
	"	132+29,	"	93.86	"	175,	" 92.41
	"	132+40,	"	94.54	"	176,	" 91.91
	"	133,	"	93.91	"	177,	" 91.63
26	"	134,	"	93.71	"	178,	" 91.76
	"	135,	"	93.58	"	179,	" 91.95
	"	136,	"	93.83	"	180,	" 91.79
	"	137,	"	93.89	"	181,	" 92.09
	"	138,	"	94,06	"	182,	" 92.59
	"	139,	"	93.71	"	183,	" 92.47
	"	140,	"	93.91	"	184,	" 92.31
	"	141,	"	93.88	"	185,	" 92.98
	"	142,	"	93.75	"	186,	" 92.79
	"	143,	"	93.43	"	187,	" 92.89
	"	144,	"	92.94	"	188,	" 92.00
	"	145,	"	93.13	"	188+20,	" 91.89
27	"	146,	"	93.02	"	188+40,	" 91.13
	"	147,	"	93.13	"	188+50,	" 89.42
	"	148,	"	93.33	"	188+60,	" 89.33
	"	149,	"	94.08	"	188+80,	" 90.72
	"	150,	"	93.79	"	188+90,	" 91.41
	"	151,	"	92.96	"	189,	" 91.54
	"	152,	"	92.84	"	190,	" 91.79
	"	153,	"	92.67	"	191,	" 91.53
	"	154,	"	92.71	"	192,	" 91.83
	"	155,	"	92.33	"	193,	" 91.30
	"	156,	"	92.38	"	194,	" 91.31

28 Station 195, Elevation 91.47 Station 201, Elevation 90.72
" 196, " 91.66 " 202, " 90.69
" 197, " 90.72 " 203, " 90.52
" 197+80, " 90.51 " 204, " 91.16
" 198, " 91.37 " 205, " 92.44
" 199, " 91.46 " 206, " 91.26
" 200, " 91.13

Q—That was the end line on your survey, on that straight line?

A—Yes, sir; the first time.

Q—Did you at any time continue that line any fur-
29 ther?

A—Yes, sir; I have the notes of that survey.

Q—Will you read the stations and elevations of that survey, beginning at Station 207?

By The COURT—Q—Still going west?

A—Yes, sir.

By Mr. HAGGIN—Q—Is that a continuation of the same line?

A—Yes, sir; Station 207, elevation 91.11; Station 208, elevation 90.37; Station 209, elevation 90.45; Station 210, elevation 90.41; Station 211, elevation 90.49; Station 211+20, elevation 90.64.

30 By Mr. HOUGHTON—Q—How far did that continue from the starting point, Station 211+20?

A—Four miles, just four miles. We took the levels from that point, on a direct line to the stake I have mentioned. The level at the end of the fourth mile, Station 211+20, is 90.64, and at the stake on the ground it is 92.15.

Q—What is the distance between those two points?

A—Twenty-seven hundred and forty-seven feet. We did not run hundred-foot levels between those two points. The course between the two points was south $78\frac{1}{4}^{\circ}$ west, and that took us to the post which I have referred to,
31 and which I was told was the centre of Section 12.

Q—When you speak of "plus" after a station here, what does that mean?

A—So many feet from the last hundred foot station.

Q—What is the object of taking those stations which are marked "plus"?

(Defendants object, as not being rebuttal. The objection is sustained, and the plaintiffs except.)

Q—I understand you to say that from the stake which you found near Harold's house you continued through west and through the drag-line which you referred to?

A—Yes, sir. In making that survey we had a level and a transit, and a rod and a chain.

Q—Did you at any point, in running across that line, come to or reach water? Did you cross any water at all in running that level?

(Objected to by the defendant as incompetent and outside of the testimony allowed by the Court. The objection is sustained, and the plaintiffs except.)

The WITNESS—The line that we ran through there was a direct line for four miles, as near as we could run it.

Q—Did you come to a pond, and run around it in running that line?

A—We came to a pond; we came not directly to it on a line—to a slough leading from that pond.

Mr. FLOURNOY—We object to that, and move to strike that answer out, as not responsive to the question.

(The motion is granted, and plaintiffs except.)

Mr. HOUGHTON—Q—The pond which you came to, which side of your line was it on?

A—On the south.

Q—Did you run around that pond?

A—Yes, sir. The pond was south of the line that we ran one hundred and eighty-two feet.

Q—At what station did you start from when you ran around that pond?

A—Station 132+40. This pond was directly south of stations 132 and 131.

By the COURT—Q—Does not your level run right directly across the swamp land, directly west?

A—Yes, sir; as near as we could run it. We took a course at one end and run a straight line as near as the eye could show us a straight line, and our profile shows that.

Q—Your profile shows that, does it?

A—Yes, sir; the profiles of the levels do not show it, no, sir. This profile represents the direct line that I run.

By Mr. HOUGHTON—Q—It don't represent any line around anything?

A—No, sir.

Q—Will you give the courses, distances and elevations in running around that pond?

[Objected to by the defendant as not being rebuttal, and as immaterial. The objection is sustained, and the plaintiffs except.]

36 The WITNESS—In going across there I found no other pond to the south of this ~~line~~ line with water in it.

Q—Did you see any other pond close to your line, or did you cross any other pond going across?

A—I did not cross any other pond.

Q—And you were on the drag-line, where the tules were dragged down, going due west, from the time you left the starting point until you got to station 211?

A—Yes, sir.

Mr. HOUGHTON—We offer to show the courses and distances and elevations from station 131, around to station 133, going around this pond, by this witness, as
37 surveyed by him at that time. We make that offer.

By the COURT—Q—Was that line drawn on the profile?

A—No, sir; the profile simply shows a straight line across.

Q—You may give the elevations around the pond?

A—I have not the elevations around the pond; I never took them. I made a survey around the pond and meandered it.

By Mr. HOUGHTON—Q—Then will you give the courses and distances around the pond?

Mr. HAGGIN—That we object to.

38 The COURT—The objection is sustained.

[The plaintiffs except.]

The WITNESS—That profile is made on a scale of one to twenty, one foot vertical to twenty horizontal; and each one of those stations running from east to west, represents one hundred feet, and the other way the same space represents five feet. The figures at the bottom line show the elevations at the stations. They represent the elevations. I read the elevations of these stations from my notes. I stated at the commencement that this profile was made from the notes of the other
39 surveyor; that there were two lines, and that my line varied slightly from that, but not enough to make any difference in that line that you could perceive. The figures represent elevations at the particular points where the figures are located. This is true, as to the one hundred feet stations, and also as to the "plus" stations.

[The profile is offered in evidence, and marked "Plaintiffs' Exhibit 41."

It is objected to by the defendant, on the ground that at certain stations on the profile the word "slough"

40 appears, and that it expresses a state of facts that has been ruled out from the testimony, and the Court rules that the profile cannot be entered in evidence unless the word "slough," wherever it may appear on the profile, is eliminated.

Mr. McAllister—Now we want to show, without making another map, where this word "Slough" is marked upon this map at different stations by the reporter, and we will then try and have the word erased, so as to conform to the rulings of the Court, without the trouble of making another map.

The Court—Very well; proceed.

41 Mr. McAllister—Then we ask the reporter to note that the word "Slough," on this map, Exhibit 41, is marked at Station 70; it is also marked about Station 111, or near it; also at Station 118; also between Stations 131 and 132, and at Station 171; also at Station 188. These are the different depressions there which the surveyors have marked "Slough." Now we will ask the surveyor to erase them.

Mr. Houghton—And the plaintiffs except to the ruling of the Court, refusing to let the map in with those marks upon it. We ask the witness now to read the side-notes which he has in connection with this survey

42 in the margin, and opposite Stations 14, 21, 44, 48, 69, 70, 71, 105, 110, 117, 130, 131, 132, 169, 171, 188, 189, 194 and 206. We desire that he shall express the facts which he found there and noted at the time, to refresh his memory by the notes referred to opposite these separate stations, and also the side-note opposite station 211, a continuation of the survey, and opposite 211+20.

Mr. McAllister—We do not offer them as side-notes, but that the witness shall take the stand and read those notes to refresh his recollection, and state the facts that occurred at the time he made the survey.

43 Mr. Flournoy—We object to that on the same ground.

Mr. Garber—What's the object?

Mr. McAllister—To prove what the fact is at the time they were made.

Mr. Garber—Showing physical facts?

Mr. McAllister—Certain physical features. The ordinary side-notes of the surveyors.

[The objection is sustained and the plaintiffs except.]

Mr. Houghton—We have one more offer to make in

connection with that. We offer to show by this witness, that at the pond which he found at Station 132, in making this survey, and which appears upon this profile, that he examined the pond, and found both an outlet and an inlet to that pond.

Mr. McAllister—Which pond we claim to be the same pond spoken of by Mr. McMurdo and Fillebrown.

Mr. Flournoy—I object.

The Court—The objection is sustained.

[Plaintiffs except.]

Mr. Houghton—I call attention to the fact, that on Thursday or Friday last certain notes in connection with the surveys made by Mr. McMurdo were offered in evidence, and marked *a*, *b*, *c*, *d*, *e*, *f*, *g* and *h*; and the book being taken away by Mr. McMurdo at the time, they did not get into the report of the case. They were offered in evidence at that time, but he took them away with him, and they could not go in then. I make this statement now, so that when they appear out of order it will appear what they are, and they will be taken in connection with the proper evidence in the proper place.

48

MAIN LINE. (EXHIBIT "a.")

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.
1804+34	27° 36′ L.	S. 53° 17′ W.		
1819+44	41° 17′ R.	N. 85° 26′ W.		
1836+75	10° 47′ R.	N. 74° 39′ W.		
1849+22	48° 45′ L.	S. 56° 36′ W.		
1881+77	31° 45′ R.	S. 88° 21′ W.		
1902+75	9° 46′ R.	N. 81° 53′ W.		
1920+26	33° 35′ L.	S. 64° 32′ W.		
1947+37	41° 39′ L.	S. 22° 53′ W.		
49 1972+14	20° 31′ R.	S. 43° 21′ W.		
1984+37	37° 46′ R.	S. 81° 10′ W.		
1989+30	22° 59′ R.	N. 75° 51′ W.		
2015+78	35° 39′ L.	S. 68° 30′ W.		
2050+55	28° 28′ L.	S. 40° 02′ W.		
2055+94	20° 20′ R.	S. 60° 22′ W.		
2069+30	15° 23′ L.	S. 44° 59′ W.		
2082+67	36° 08′ R.	S. 81° 07′ W.		
2117+86	7° 55′ L.	S. 73° 12′ W.		
2144+83	2° 33′ R.	S. 75° 47′ W.		
2157+27	4° 45′ R.	S. 80° 32′ W.		
2172+57				

(EXHIBIT "b.") (EXHIBIT "b 2.")

Line "F," (South Branch Kern River), Var. 14° 55′ East.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	Commences at Station 1836+75 of Main Line.
1819+44	41° 17′ R.	N. 85° 26′ W.			
1836+75	10° 47′ R.	N. 74° 39′ W.			
1836+75	88° 07′ L.	S. 6° 27′ W.			
1844+46	15° 06′ R.	S. 21° 33′ W.			
1848+56	21° 57′ R.	S. 43° 30′ W.			
1858+17	32° 46′ L.	S. 10° 44′ W.			
1883+35	5° 47′ L.	S. 4° 57′ W.			
1885+90					Intersect right bank of Kern River.
1887+10					" rigth bank of Kern River.
1888					" left bank of Kern River.
1892+54	70° 31′ R.	S. 75° 28′ W.			
1893+03					Intersect left bank of Kern River.
1894+76					" right bank of Kern River.
1901+08	53° 18′ L.	S. 22° 10′ W.			On " " " "
1902+58					Left bank of Kern River.
1907+43	60° 15′ R.	S. 28° 25′ W.			On Kern River.
1914+40	51° 08′ R.	S. 79° 33′ W.			In bed of river, near bank.
1926+28	3° 17′ R.	S. 82° 50′ W.			Right bank of Kern River.
1925+80					" " " "
1944+94	16° 29′ L.	S. 66° 21′ W.			" " " "
1951+04	12° 26′ L.	S. 53° 55′ W.			" " " "
1968+42					" " " "

(EXHIBIT "c.") (EXHIBIT "c 2.")

Line F, South Branch of Kern River, Var. 14° 55′ East.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	
1970+36					Left bank of Kern River.
1974+30					Right " " "
1975+46	35° 03′ L.	S. 18° 52′ W.			
1985+90					Intersect small channel, 15 links wide.
1990+20	45° 45′ R.	S. 64° 37′ W.			
2035+79	15° 30′ L.	S. 49° 07′ W.			
2054+21	11° 15′ R.	S. 60° 32′ W.			2041+11 to right bank of Kern River.
2085+05	3° 34′ L.	S. 56° 48′ W.			2041+60 to left " " "
2130+83	45° 13′ L.	S. 71° 35′ W.			2086+80 left bank of small channel.
2140+81					Board fence, 2087+37 right bank of small channel.
2143+65	73° 45′ R.	S. 85° 18′ W.			2091+64 left bank of Kern River.
					2092+87 right " " "
25					
2154+52					To point of intersection of south branch of Kern River and Buena Vista Slough, from Station 2154+52, a willow tree, blazed on north side, bears N. 88½° E, 2.42 chains distant.

(EXHIBIT "d.")

(EXHIBIT "d 2.")

Line "G," Buena Vista Slough, Var. 14° 55′ East.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	Commences at Station 2130+83 of Line F.
2130+83	89° 56′ R.	N. 33° 16′ W.			
2148+71	21° 38′ L.	N. 54° 54′ W.			2143+60 to small slough, 55 links wide.
2163+20	10° 57′ L.	N. 65° 41′ W.			2229 " "
2183+07	10° 49′ R.	N. 55° 02′ W.			2240+60 left bank of branch of Kern River.
2196+85	18° 14′ R.	N. 36° 38′ W.			2241+22 right " " " "
2213+41	9° 49′ R.	N. 26° 49′ W.			2262+38 left bank of small slough.
2237+27	39° 08′ L.	N. 66° 07′ W.			2263+60 right " " "
	102° 39′ R.	N. 75° 40′ E.			2264+80 left bank of Kern River.
	72° 37′ L.	S. 80° 24′ W.			2267 right " " "
2254+47	30° 32′ R.	N. 35° 35′ W.			2278+49 left bank of slough.
2268+05	16° 35′ R.	N. 19° 00′ W.			2278+78 right " "
2282+55	28° 10′ L.	N. 47° 10′ W.			2414+43 east bank of slough.
2298+45	18° 29′ L.	N. 65° 39′ W.			2416+40 west " "
2318+82	18° 23′ R.	N. 47° 16′ W.			
2335+72	31° 10′ R.	N. 16° 06′ W.			
2358+11	50° 58′ L.	N. 67° 04′ W.			
2391+73	23° 48′ R.	N. 43° 16′ W.			
2419+96	6° 43′ L.	N. 49° 59′ W.			
2447+79	28° 12′ R.	N. 21° 47′ W.			
2459+79	29° 47′ L.	N. 51° 34′ W.			
2479+18	17° 35′ L.	N. 69° 09′ W.			Sta. 1, Swamp Land Survey.

(EXHIBIT "e.")

(EXHIBIT "e 2.")

Line "G," Buena Vista Slough, Var. 14° 55′ East.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	
2459+75	29° 47′ L.	N. 51° 34′ W.			On line "G."
2479+18	17° 30° L.	N. 69° 09′ W.	N. 69° 30′ W.		On line "G," Sta. 0, on Swamp Land Survey.
2481+58	11° 00′ R.	N. 58° 15′ W.			
2485+88		N. 78° 45′ W.			
2525+85		S. 89° 45′ W.			
2539+49		N. 57° W.			
2550+73		N. 48° 30′ W.			
2577+08		N. 28° W.			
3604+60		N. 79° W.			
2625+30		N. 20° 30′ W.			
2640+46		N. 28° E.			
		N. 34° 30′ E.			
		N. 56° W.			
2658+34		N. 16° 30′ E.			
		S. 52° 15′ W.			
2687+38		N. 12° W.			
2705+29		N. 44° W.			
2732+92		N. 59° W.			
2750+80		N. 39° W.			
2768+65		N. 22° 45′ W.			

(EXHIBIT "f.")

(EXHIBIT "f 2.")

Line "H," Alejandra Slough, Var. 14° 55′ East.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	Commences at Station 2346+56, Line G.
					STATIONS.
2335+72	31° 10′ R.	N. 16° 06′ W.		10.84	2350+25 left bank of slough.
2346+56	109° 43′ R.	S. 86° 23′ E.		14.31	2351+12 right " "
2360+87	29° 49′ L.	N. 63° 48′ W.		11.35	2383+40 left " "
2372+22	16° 12′ L.	N. 47° 36′ E.		15.33 E.	2386+65 right " "
2387+55	40° 52′ R.	N. 88° 28′ E.		58.33	2388+70 " " "
2445+88	12° 34′ L.	N. 75° 54′ E.		16.03	2390 left " "
2461+91	22° 35′ R.	S. 81° 41′ E.		17.11	2395 " " "
2479+02	1° 48′ L.	S. 83° 29′ E.		15.53	2396 right " "
2494+55	50° 35′ L.	N. 45° 56′ E.		14.75	2415+80 left " "
2509+30	32° 55′ R.	N. 78′ 51′ E.		11.14	2416+40 right " "
2520+44	11° 18′ R.	S. 89° 51′ E.		9.84	2417+18 fence on west line Sec. 20, T. 30, R. 25.
2530+28	7° 31′ R.	S. 82° 21′ E.		11.71	2446+49 right bank of slough.
2541+99	7° 30′ R.	S. 74° 5.′ E.		13.98	2447+80 left " "
2555+97	38° 03′ L.	N. 67° 07′ E.		27.01	2448 " " "
2582+98	46° 15′ L.	N. 20° 52′ E.		20.90	2460+15 " " "
2603+88	51° 02′ R.	N. 71° 54′ E.		6.48	2461+29 " " "
2610+36	47° 59′ R.	S. 60° 07′ E.		34.70	2461+71 right " "
2645+06	22° 57′ L.	S. 83° 04′ E.		21.39	2495+70 " " "
2666+45	24′ 28′ R.	S. 58° 36′ E.		32 70	2497+80 left " "
2699+15	19° 13′ L.	S. 77° 49′ E.		5.69	2499+96 fence on east line Sec. 20, 30, 25.

75 74 73 72

(EXHIBIT "f"—Continued.)

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	Commences at Station 2346+56, Line G.
					STATIONS.
2704+84	45° 35′ L.	N. 56° 36′ E.		24.78	2510+70 left bank of slough.
					2512 right " "
					2512+40 left " "
					2516 " " "
					2517+21 right " "
					2588+10 brush fence east line Sec. 21.
					2596+80 left bank of slough.
					2597+14 right " "
					2608+20 left " "
					2609 right " "
					2684 " " "
					2687+80 left " "
					2709 old ditch.
					2703+32 right bank of Kern River.

(EXHIBIT "g"—Line "H," Gage Slough.)

STATION	PLATE.	COURSE.	NEEDLE.	DIST.
2769+62	48° 45′ R.	S. 74° 39′ E.		22.47
2742+09	10° 47′ L.	S. 85° 26′ E.		Station.

(EXHIBIT "h.") (EXHIBIT "h 2.")

Line "K" (line to Buena Vista Lake), Var. 14° 55′ E.

STATION.	PLATE.	COURSE.	NEEDLE.	DIST.	Commences at 2154+52 of line "F."
.....	.....	S. 85° 18′ W.	S. 85° 01′ W.	....	
2154+52	46° 42′ L.	S. 38° 36′ W.	.....	6.74	2156 left bank of slough.
2161+26	47° 18′ L.	S. 8° 42′ E.	....	12.53	2160+30 levee Swamp Land District 121.
2173+79	20° 32′ R.	S. 11° 50′ W.	....	27.79	2160+80 centre of head-gate in Buena Vista Slough.
2201+58	31° 49′ L.	S. 19° 59′ E.	.....	11.53	
2213+11	20° 04′ L.	S. 40° 03′ E.	.....	30.44	2221+61 at west end of Baker's old dam.
2243+55	23° 51′ R.	S. 16° 12′ E.	.....	25.84	
2269+39	23° 11′ R.	S. 6° 59′ W.	.....	.. ..	2291 point 20 links east of Frazier's old hog camp.
2294+86	21° 36′ R.	S. 28° 35′ W.	.....	.....	
2319+32	49° 30′ R.	S. 78° 05′ W.	.....	.....	2335+20 edge of tules in Buena Vista Lake.
2334+92	80° 09′ L.	S. 2° 04′ E.	.....	.....	2339+20 N. bank of slough.
2386+48	.....	S. 47° E.	.....	....	2334+80 S. " "
2394+40	.....	S. 50½° E.	.....	.....	
2413	.....	S. 54½° E.	.....	....	
2427+52	.....	S. 24½° E.	.....	.....	
2429+81	.....	S. 27° 80′ W.	.....	.....	
2438	.....	.....	.....	.....	Inside of margin of tules in bed of Buena Vista Lake.

80 Direct-examination of

GEO. W. SMITH.

Resumed.

The WITNESS—When we made this survey, we started from a point in the vicinity of Harrold's house.

By Mr. HOUGHTON—Q—Please read the second headnote that you have in connection with the survey you made when you went back to fix the corner you started from in making this first survey?

A—"Afterward, taking course and distance south-
81 "west corner of Harrold's house from starting point,
"find it bears north 15° 25′ west, distance 273.24 feet
"by actual measurement."

Cross-examination of

GEORGE W. SMITH.

By Mr. HAGGIN—Q—When did you make this last note you read?

A—That was made on the ground last Sunday, the
82 29th of this month. I was sent there by my employer, Mr. Houghton, to take that course and to continue that line four miles. I took that course myself with a transit, and I got the measurement with a chain. Mr. McCray was with me, Mr. Wright and my brother. We all used the transit, and all looked at it. I think Mr. Wright set the instrument, if I remember right. I looked at it myself. I made a note of it myself, and that is the note that I have read that I made. The measuring was done by my brother and Mr. Wright, I think. I saw the measurement myself, and went right along with the chain. To make the measurement, we
83 started from the point we had started from to make the levels. That was the point I described as having been shown to me by Mr. Harrold. It was a piece of stake driven into the ground, a thin stick, about one and a half inches wide, driven to the surface of the ground, a flat stake, perhaps half an inch wide. The ground there was a loam, dry loam, and weeds immediately by it, but not right where the stake was. Harrold showed me the stake. Mr. McCray and Wright were running lines the same time, levels. In running those lines, we only used one chain, but two rods and two

84 instruments. The instruments were nearly together all the time, keeping nearly side by side. Sometimes we were farther apart than others; we had nothing definite about it. In running the lines, the lines were not more than four, five or six feet apart at any time. I did not make profile 41 myself. It very nearly corresponds to my notes, not exactly.

[The word "Slough," wherever it appeared on the profile having been erased, the profile is now offered in evidence, marked "Exhibit 41,"]

[Here insert.]

85

E. T. WRIGHT,

Being called as a witness for plaintiff and sworn, testifies as follows:

I reside in Los Angeles. My occupation is that of a surveyor. I am the County Surveyor of that County; have been County Surveyor for a year and three months, and am now.

By Mr. HOUGHTON—Q—Did you go with Mr. George Smith, the witness last on the stand, and Mr. McCray and another Smith, and run a line of levels between
86 Buena Vista and Tulare Lakes?

A—Yes, sir. I left here to do that a week ago last Saturday, May 21st. We were two days running on those lines. I went back again afterwards to that line. The first time we ran that line, we ran two hundred and six stations, and we went back on May 29th.

Q—How far did you continue it then, if at all?

A—We continued the straight line five hundred and twenty feet farther. That made the line a straight, continuous line four miles long; and we ran from that point, the end of the four miles to the stake marked "One Quarter S."

87 Q—What distance and course?

A—South $78\frac{1}{4}^{\circ}$ west, two thousand four hundred and forty-seven feet.

Q—Did you, on that day when you went back again, do any other work on that line, on the east end of it?

A—We located the starting-point from the southwest corner of Harrold's house.

Q—Give that starting-point.

A—"Southwest corner of Harrold's house, bears "north 15° 25′ west from the station north, distant $273\frac{1}{4}$ "feet."

88 Q—What did you take as a starting-point when you commenced to run those levels?

A—A little stake shown to us by Mr. Harrold, situated as I have said. I made this profile, Exhibit 41. It is made from the notes of my survey, taken at that time.

Q—Do the figures, which are underneath that line, the same as on your note-book, represent the elevation?

A—Yes, sir. They represent the elevations at the different hundred-foot stations. I have checked those off with my book. Each figure represents the elevation at the particular point where the figure is placed, and
89 the "plus" stations represent the elevations at those points. The scale of that map is one foot elevation to twenty horizontal. When we ran that line across from the starting-point the course was west, as near as the needle would read.

Q—Was there any mark along the line where you ran through? If so, what was it?

A—The tules were broken down, apparently dragged. They looked as if they had been dragged. There were wagon tracks through there. Eight of us in all went through there—two surveying parties. I ran a line with Mr. McCray; the other two were George Smith and his
90 brother. Both those lines were run within that drag line, following it, for the two hundred and six stations the first day, and then we extended the cross line. The cross line ended where the tules gave out, and then we continued on that same line west, extending the same line with a transit to keep the course.

Q—Did you, in making that survey, go around any object, or did you continue in a straight line in running the four miles?

A—We continued in a straight line. The profile Exhibit 41 represents a straight line between the starting point and the four-mile station.
91 Q—Did you, in making that survey, come to any lake or pond on the south side of that line?

A—Yes, sir. It fell south of Station 132, about one hundred and eighty feet. We came to no other lake or pond in going across there, on the south side of the line.

Mr. HOUGHTON—We desire to prove by this witness the same state of facts that we offered to prove by the others. I don't suppose it is necessary to repeat it.

Mr. MCALLISTER—We propose to show by him the

92 same as we offered to prove by Mr. Smith, which your Honor ruled out.

Mr. HAGGIN—We object.

The COURT—The some ruling.

[Plaintiffs except.]

By Mr. HOUGHTON—Q—What is the meaning of those figures in red, and some in black, between the stations, on this Exhibit 41? What do the red figures represent?

A—The red figures represent the plus or intermediate stations, and the black the elevations of those plus stations.

Mr. HOUGHTON—Q—We make the offer to prove by
93 this witness that, at these crossings where he ran the level across where these depressions appear, he found well-defined channels, and followed them north and south, and that they were continuous, and did not run out.

Mr. FLOURNOY—We object.

[The objection is sustained, and the plaintiffs except.]

By Mr. HAGGIN—Q—You say that you have your notes. Will you let me see those notes?

A—[The witness produces his notes, and hands them to Mr. Haggin.]

By Mr. HOUGHTON—Q—Where work is done by an
94 engineer or surveyor running a profile across the country, what is the scale that is usually used in getting up profiles of this work?

A—My experience with railroad work is that it is one to one hundred.

Q—Then this is not the scale usually used for levelling, where you wish to show a vertical section of a piece of country?

A—No, sir; not the ordinary scale. The ordinary scale is one to one hundred, or one to ten. One to ten I have used in city work, where I have been in the
95 habit of working, for short distances.

Cross-examination of

E. T. WRIGHT.

By Mr. HAGGIN—Q—Just call off those elevations that you have there. Start with the assumed elevation of one hundred?

Mr. MCALLISTER—At the stake.

A—At the stake, zero, 100.

		Elevation.		Elevation.
96	Station 1	99.97	Station 46	97.30
	" 2	100.10	" 47	97.10
	" 3	100.31	" 48	96.45
	" 4	99.09	" 49	96.95
	" 5	99.21	" 50	97.18
	" 6	99.21	" 51	96.95
	" 7	99.23	" 52	97.09
	" 8	100.28	" 53	96.93
	" 9	99.28	" 54	97.05
	" 10	98.98	" 55	96.83
97	" 11	98.70	" 56	96.73
	" 12	99.03	" 57	96.89
	" 13	98.55	" 58	96.52
	" 14	98.57	" 59	96.60
	" 15	98 48	" 60	96.08
	" 16	98.54	" 61	96.70
	" 17	98.36	" 62	96.84
	" 18	98.18	" 63	96.59
	" 19	98.56	" 64	96.69
	" 20	98.34	" 65	96.52
	" 21	98.47	" 66	96.79
	" 22	98.49	" 67	96.68
98	" 23	99.04	" 68	97.32
	" 24	98.79	" 69	97.58
	" 25	98.54	" 69+50	97.38
	" 26	98.39	" 70	96.07
	" 27	98.47	" 70+50	96.90
	" 28	98.52	" 70+66	97.45
	" 29	98.17	" 71	97.60
	" 30	98.07	" 72	97.44
	" 31	98.17	" 73	97.29
	" 32	98.42	" 74	97.19
	" 33	98.57	" 75	97.04
	" 34	98.52	" 76	96.90
99	" 35	98.39	" 77	96.97
	" 36	97.95	" 78	96 72
	" 37	97.75	" 79	97.08
	" 38	97.85	" 80	96.64
	" 39	97.60	" 81	96.74
	" 40	97.45	" 82	96.54
	" 41	97.35	" 83	96.76
	" 42	97.25	" 84	96.63
	" 43	97.40	" 85	96.62
	" 44	97.48	" 86	96.55
	" 45	97.45	" 87	97.02

		Elevation.			Elevation.
100	Station 88	97.04	Station	127	94.29
	" 89	96.81	"	128	94.08
	" 90	95.92	"	129	93.86
	" 91	95.84	"	130	93.44
	" 92	95.90	"	131	92.84
	" 93	95 75	"	131+50	91.62
	" 94	95.90	"	131+90	91.39
	" 95	95.90	"	132	89.57
	" 96	95.75	"	132+7	89.29
	" 97	95.75	"	132+20	89.82
101	" 98	95.50	"	132+29	93.84
	" 99	95.77	"	132+40	94.50
	" 100	95.48	"	133	93.83
	" 101	95.00	"	134	93.88
	" 102	94 78	"	135	93.78
	" 103	94.86	"	136	94.01
	" 104	94.28	"	137	94.01
	" 105	94.47	"	138	94.08
	" 106	94.48	"	139	93.81
	" 107	94.66	"	140	93.80
	" 108	94.70	"	141	93.84
	" 109	94.98	"	142	93.82
102	" 110	94.95	"	143	93.44
	" 110+60	90.01	"	144	93.04
	" 110+70	92 98	"	145	93.19
	" 111	94 20	"	146	93.17
	" 112	94.25	"	147	93.24
	" 113	94.51	"	148	93.26
	" 114	94.24	"	149	94.08
	" 115	94.68	"	150	93.75
	" 116	94.22	"	151	93.13
	" 117	94.05	"	152	93 07
	" 117+80	93.82	"	153	92.77
	" 118	93.07	"	154	92.72
103	" 118+20	91.50	"	155	92.41
	" 118+40	92.78	"	156	92.33
	" 118+60	93.57	"	157	92.32
	" 119	93.73	"	158	92.52
	" 120	93.73	"	159	92.57
	" 121	94.07	"	160	92.96
	" 122	94.23	"	161	92 57
	" 123	94.42	"	162	92.79
	" 124	94.61	"	163	92.67
	" 125	94 49	"	164	92.67
	" 126	94 31	"	165	92.37

104

	Elevation.		Elevation.
Station 166	92.28	Station 188+50	89.39
" 167	92.16	" 188+60	89.14
" 168	92.38	" 188+80	90.60
" 169	92.04	" 188+90	91.36
" 169+50	91.74	" 189	91.45
" 170	90.81	" 190	91.70
" 170+35	90.02	" 191	91.42
" 170+60	90.84	" 192	91.70
" 171	91.92	" 193	91.15
" 172	92.01	" 194	91.30
105 " 173	92.04	" 195	91.40
" 174	92.39	" 196	91.60
" 175	92.27	" 197	90.62
" 176	91.98	" 198	91.30
" 177	91.63	" 199	91.36
" 178	91.80	" 200	90.77
" 179	91.95	" 201	90.83
" 180	91.95	" 202	90.76
" 181	91.90	" 203	90 77
" 182	92.50	" 204	91 20
" 183	92.45	" 205	92.48
" 184	92.35	" 206	91.40
106 " 185	92.93	" 207	91.01
" 186	92.85	" 208	90.44
" 187	92.70	" 209	90.43
" 188	91.98	" 210	90.43
" 188+20	91.80	" 211	90.33
" 188+40	91.02	" 211+20	90.62

The WITNESS—[Continuing]—At the end of the line and quarter-stake, 92.15. The station at that stake is 211+20, and then 27+47 farther. We changed the course.

107 Q—Twenty-seven stations plus forty-seven feet?

A—Yes, sir; we took two intermediate stations, just at the turning-points, to get the end of the elevation.

By Mr. HOUGHTON—Q—I omitted to ask one question. You say that on last Sunday you were down there again in that locality. Did you then do any other work on that slough or in that swamp land?

A—Yes, sir.

Q—What was that?

A—It was a cross-section from the DeWeber road.

Mr. HOUGHTON—What we offer to show by this witness is, that he, with Mr. Smith, the last witness, made

108 a cross-section of this DeWeber road at Buena Vista Slough, at a point where the DeWeber road crosses it, near the place where the old pump was. Certain witnesses of defendant testify as to just what that slough was at that point where that road crosses. We offer to show by this witness that he cross-sectioned that slough at that point, and what the result of that cross-section was.

Mr. GARBER—From the instruments?

Mr. HOUGHTON—Yes, sir; certainly.

Mr. FLOURNOY—We object to that. It is merely a contradiction of our testimony; of a contradiction of
109 theirs.

The COURT—There was a number of witnesses who testified positively as to there being a slough there. I think there were more witnesses on the part of the plaintiff testified that there was a slough there than testified that there was not a slough there.

By Mr. MCALLISTER—Q—What kind of a survey did you make there?

A—We took the elevations and levels across the channel at that point, and took the width and depth of the water.

Mr. FLOURNOY—The testimony offered is merely cumu-
110 lative.

The COURT—I think the testimony of defendants' witnesses, all of them, upon that point was not uniform, and that the testimony of plaintiffs' witnesses was that there is a slough down there. It appears to me it is just simply cumulative testimony.

Mr. HOUGHTON—We make the offer.

The COURT—I will sustain the objection.

[Plaintiffs except.]

Mr. HOUGHTON—And I understand that, without recalling Mr. Smith, we can make the same offer to prove the same fact by him?

The COURT—Yes, sir; and the same ruling and ex-
111 ception.

Re-cross-examination of

E. T. WRIGHT.

By Mr. HAGGIN—Q—What part of that leveling did you do yourself?

A—I did it all—that is, with the instrument; I used

112 the instrument myself; no one else used that instrument. I made these notes myself.

By Mr. HOUGHTON—Q—What did you use in measuring those hundred-foot stations?

A—We used a steel tape, or chain, one hundred feet long.

By the COURT—Q—A surveyor's chain?

A—Yes; sir; it is not a link chain.

By Mr. HOUGHTON—Q—How long have you been a surveyor?

A—Ten or eleven years.

113

SETH SMITH,

Being called as a witness for plaintiffs in rebuttal, testifies as follows:

I reside at Visalia. I am the County Surveyor of that county, and have been for a little over three years. I have been engaged in surveying as an occupation about thirteen years.

By Mr. HOUGHTON—Q—Have you at any time run lines of levels on the swamp lands between Tulare and Buena Vista Lakes?

114 A—I have not run an instrument across there. I assisted in running levels through there. We commenced on the 21st of this month, Saturday a week ago.

Q—When you went there at that time, from what point did you start?

A—We started from the stake about south from Harrold's house—about three hundred feet was the note I made of it at the time. Mr. Harrold showed us the point to start from. It took us two days to run that line across there. Mr. McCray, Mr. Wright and my brother were with me.

Q—What course did you take in running that line?

115 A—We went west.

Q—Was there anything to mark that line along where you went, anything to indicate that any one had been through there before?

A—Yes, sir. It looked as if a wagon had been driving along there, driven to the west; the tules were all broken to the west.

Q—Were the tules dragged down there?

A—Yes, sir.

Q—Did you run right along that drag-line that day?

A—Yes, sir.

116 Q—How far did you run from that line out?

A—To station 206.

Q—Did you go back there to run that line any farther?

A—Yes, sir, last Sunday.

Q—How far did you run that straight line then?

A—Four miles. Then we took a straight course to a stake said to be in the centre of Section 12. The course to that stake was south $78\frac{1}{4}^{\circ}$ west, and the distance two thousand seven hundred and forty-seven feet.

Q—When you went back there Sunday, did you do anything in connection with fixing the location of your
117 starting point?

A—Yes, sir. We fixed it from the southwest corner of the Harrold house, from which it bears north $15\frac{1}{4}^{\circ}$ west, 273.24 feet. My brother, George Smith, assisted me in running that line of levels. I carried the rod. I made notes at the time. I made a separate set of notes. The stations were usually one hundred feet apart.

Q—What do you mean by usually?

A—We sometimes took plusses. Our regular stations were one hundred feet apart.

Q—How did you measure the distance?

118 A—With a chain, a surveyor's chain.

Q—How did your figures agree with your brother's?

A—They agreed; they were the same as his. I have my notes with me. I have seen profile Exhibit 41. I have gone over that with my notes to see whether it is correct. It is a correct profile of the level line that we ran there. I took my notes from the readings of the rod. I took them as I read the rod. Those notes purport to represent the readings of the rod as I took them, and the elevations also. I kept the regular notes, as if I was running the instrument. I got the reading
119 from my brother, from the instrument. He gave them to me; but I don't know whether he gave them correctly or not. He gave me the readings, and I put them down at the time, when he motioned to me. When he motioned to me to read, I read the rod, and took the notes.

Q—Please explain the manner of getting that record?

A—In keeping the notes—the end man was a hundred feet ahead of the instrument, of course, at least a hundred feet—not always there, but he was there at either

120 one side or the other of the instrument, and so far at times that, instead of talking to me, he would motion for me to raise the target on the rod; and then when he would motion to me that it was right, I would screw up the target, and read the reading of the rod, on the rod, and would then put it in my book.

Q—Then you took the readings yourself?

A—Yes, sir; I took the readings myself, and put them in the book.

Q—Is this Exhibit 41 a correct profile of the levels run through there by you?

A—It does not exactly correspond with my notes.
121 At no turning point is there a variation to exceed one tenth of a foot, and the greatest variation at any hundred foot station does not exceed that a great deal. My notes are precisely the same as those given by my brother. The two level lines run across there were run probably from three to six feet apart.

Q—Did you, in going across there, at any point find a pond or lake on the south side of the line?

A—Yes, sir.

Q—Did you find more than one?

A—No, sir.

Q—Opposite what station did you find that lake or
122 pond?

A—Station 132.

Mr. Houghton—I do not suppose there is any occasion of repeating the offer as to this witness. The understanding is, that we make the same offer in connection with this witness, and also in connection with the slough near the Bonestell house, that we made as to the other witnesses.

The Court—The same ruling.

[And the same exception.]

Mr. Haggin—About this slough, did you have all four
123 of them?

Mr. Houghton—Yes, sir; we had all four of them about this slough.

Cross-examination of

Seth Smith.

By Mr. Haggin—Q—Were those two levels that you and your brother and McCray and Wright ran, run on parallel lines, straight lines?

A—Yes, sir; Mr. McCray and I carried the rod, and I walked on one side of the drag-line and he on the other.

124 We just kept along the drag-line track I speak of. We went right along in there. He would be sometimes a hundred feet ahead of me, or I a hundred feet ahead of him. The difference north or south, would be about five feet.

WEDNESDAY, June 1, 1881.

F. P. MCCRAY,

Being called for plaintiffs in rebuttal, and sworn, testi
125 fied as follows:

By Mr. HOUGHTON—Q—Have you at any time run a line of levels across the body of swamp lands lying between Buena Vista and Tulare lakes?

A—Yes, sir; I did that a little over a week ago. I was assisted by George and Seth Smith and E. T. Wright.

Q—In running those levels, what did you take as a starting point?

A—I took as a starting point the top of a peg set near Harrold's house, driven into the surface of the ground.

126 Q—How far was that from Harrold's house, and in what direction?

A—South 15° 25′ east, two hundred and seventy-four feet. Mr. Harrold showed me that peg or starting point. After taking that starting point, we ran west along the drag-line through the tules.

Q—What do you mean by the drag-line? Describe that.

A—I mean a line that was made through the tules. The tules were broken down by some means. We ran two lines of levels through there. I presume they were
127 four or five feet apart, north and south. One was run on one side of the road and the other on the other.

Q—How far did you run along that drag-line in a westerly direction before you made a turn?

A—I ran four miles. I was there twice, however.

Q—How far did you run the first time you were there?

A—Ran two hundred and six stations before making a turn. I went there again, and continued that line five hundred and twenty feet, beginning from the two hundred and sixth station. That made four miles from the point of beginning.

128 Q—Did you run all of that four miles by one hundred foot stations?

A—By one hundred foot stations; that is, at every one hundred feet was a leveling station, and there were intermediate points.

Q—How did you measure your stations?

A—I measured them by means of a chain, an engineer's chain. The course through those four miles was west, a straight line, practically so, and right along that drag-line.

Q—After reaching that four-mile point, where did you run?

129 A—Then ran to a stake in the centre of Section Twelve to the quarter section post, in Township 29 South, Range 22, East.

Q—How far and what course did you run to get to the centre of Section 12?

A—Ran south $78\frac{1}{4}^{\circ}$ west twenty-seven hundred and forty-two feet.

Q—Do you know that was the centre of Section 12?

A—Yes, sir.

Q—In running that course across there, you say you made intermediate stations? What do you mean by that?

130 A—I mean that I took levels of the ground, as it varied between the points a hundred feet. I noted those as I took them. Mr. Wright assisted me in running the line through there. I carried the rod, and Mr. Wright ran the level. I have made a profile of that survey, made by myself. It is on a scale of one to a hundred; that is, horizontal one hundred feet to one vertical. That is the usual scale made in running levels of that kind; that is, on Plate A.

Q—Has there been any other profile of that work made?

131 A—Yes, sir.

Q—By whom?

A—By Mr. Wright. In running across there, I was generally on the north side—always, in fact, in running the north side. One line was north of the other. They were parallel lines. The north line is on the profile; but understand me, the turning-points we used were the same, and they were in the center. We each used the same turning-point. We ran the north line, the one that is upon the profile, that was offered in evidence yesterday. There were two profiles made of that particular line, one on one scale and one on another.

132 Q—Is that one of the profiles you made [showing Exhibit 41]?

A—Yes, sir.

Q—On what scale is that?

A—That is one to twenty, and that is correct from the line of levels run by myself and Mr. Wright. I have checked that off with my notes. The elvations as they appear upon that profile are according to my notes. I made a profile on a different scale, one to a hundred, and from my notes [showing it]. It is correct. I made that myself. On this profile the elevation is noted underneath the line for every one hundred-foot
133 station.

[The paper produced by the witness is marked "Plaintiff's Exhibit 42."]

The WITNESS—By one to a hundred, I mean that between each of the small vertical lines it is one hundred feet, and between each heavy horizontal line one foot; and on this profile each horizontal line representing a foot is divided into five different parts. The elevations are correctly marked on this Exhibit 42. I have also marked the stations on this Exhibit.

Q—Is every one of those stations one hundred feet apart?

134 A—They are on our general line one hundred feet apart. Then there are intermediate stations shown.

Q—Where there is anything on Exhibit 42 in red at the intermediate stations, what does that represent?

A—It represents the distance, and the black represents the elevation.

[Exhibit 42 is here offered in evidence.]

[Here insert.]

Q—In running that line across there, did you find a pond to the south?

135 A—Yes, sir.

Q—Opposite what station was that?

A—132. We ran around that pond.

Q—Have you a plat of that pond, or a survey of it, where you ran around it?

A—I have a survey of it; yes, sir. I have it with me. [Witness produces it.]

Q—What does that show, that survey?

A—It simply shows the meander of that pond; that is all. It shows the courses and distances around it from the point where we left to where we came back on the other side to the straight line. It simply shows

136 the courses and distances around it and then back to to the line.

Mr. HOUGHTON—Now, we offer in evidence, if the Court please, that survey or meander around that pond.

Mr. HAGGIN—We object to it.

The COURT—The objection is sustained.

Mr. HOUGHTON—Plaintiffs except.

Q—You say you came to this pond at the one hundred and thirty-second station?

A—Well, I came to a point opposite the pond. The elevation at that station was 89.57.

137 Q—What was the elevation of Station 131?

A—92.84. The elevation of Station 133 was 93.83.

Q—What did you find in running that line between Stations 131 and 133?

A—I took six elevations.

Q—Now, I will ask you what you found? What was between Stations 131 and 133?

A—I found a slough.

Mr. HAGGIN—One moment. I move to strike out that answer.

The COURT—The motion is granted.

Mr. HOUGHTON—Plaintiffs except.

138 Mr. HOUGHTON—We want further to show, if the Court please, by this witness, that at that point he found a channel between Stations 131 and 133; and we offer to show in connection with that the kind of channel he found, and what kind of a bank was on the east side of it, and what kind of a bank there was on the west side of it.

The COURT—It seems to me, Mr. Houghton, that the proper method of arriving at this is to ask questions and let the Court rule upon them; not to state what you propose to prove and let the Court rule upon what you

139 propose to prove. In the first place, if counsel will recollect in reference to this, it was a matter of discretion with the Court that these diagrams were introduced at all. I wish that restricted to the profiles showing the elevations of the country through which they passed, the elevations and distances, and not for the purpose of questioning the witnesses upon the physical objects that were therein seen, or any comments or notes made by surveyors in doing this work further than their statement under oath as to the correctness of the work they had done, and that that profile shows exactly what the elevations were. I wish it restricted to that.

140 Mr. HOUGHTON—Of course, I can follow this up by asking question after question which would all be met by the same objection. Now, I make that offer simply to get the benefit of a ruling on it.

The COURT—You can state what you offer to show by this witness that he found between certain stations.

Mr. HOUGHTON—I offer to show by this witness that he found between Stations 131 and 133 a slough running out of the lake or pond which he has referred to, opposite that station, and I offer to show by him the slope of the eastern bank of the slough and also of the western bank of that slough where he crossed it. And
141 I further offer to show by this witness that he followed that slough both ways and found a continuous channel from it.

The COURT—Is there any objection?

Mr. GARBER—We object.

The COURT—Objection sustained.

[Plaintiffs except.]

Mr. HOUGHTON. Q—Will you look at this Map D [showing to witness]. There is a road delineated on that map running from a house marked "De Weber"?

A—Yes, sir; I know where that road runs.

Q—Do you know where that road strikes Buena
142 Vista Slough?

A—Yes, sir; I have been at that point; I was at that point about three weeks ago.

Q—What did you do when you were at that point?

A—I cross-sectioned the slough at that place.

Q—How wide and deep did you find that slough at the point where you crossed?

Mr. FLOURNOY—The same objection we made yesterday.

The COURT—The objection is sustained. I thought the counsel understood me yesterday.

[Plaintiffs except.]

143 The WITNESS—I made Map B from actual survey. That map shows correctly the section lines running through that body of swamp land, and it shows the irregularities and variations of the section lines running through there—I mean the irregularities found in running through there to connect with the Government lines. There is no irregularity in connection with the section lines in Township 30 south, Range 24 east, of any consequence. In making the connections in that township there was only ten links variation. That occurred at the northwest corner of Section 6. There

144 is no irregularity at all in that township until you reach Section 6.

Mr. HOUGHTON. Q—What is the irregularity in the next township south—Township 29 south, Range 24 east?

A—The irregularities are shown upon the map. The greatest irregularity is 3 chains and 33 links. The greatest irregularity in Township 29 south, Range 23 east, is between Sections 24 and 19, on the township line. The error is there on account of the connection with the Government survey. The greatest error or irregularity in Township 29 south, Range 23 east, I
145 see, is seven chains and fifty links. That occurs on the north boundary of Section 6. No, that is another township. The greatest error I see in that township is five chains and forty-two links, and that appears on the line between Sections 4 and 3. The length of the line is eighty-five chains and forty-two links, instead of eighty chains. The bending of the lines that appears in certain sections in Township 29 south, Range 23 east, is to make the connection with the Government survey in running across there, in running the line to connect with the standard line, one degree short.

146 Q—When any of your section lines are shortened or lengthened by your surveys, does it appear on that map?

A—Yes, in every case.

Q—Mr. McCray, will you designate on what section in Township 30 south, Range 24 east, there are any irregularities in that line? Designate what sections they are on. Confine yourself to the swamp land.

A—Well, take Sections 9, 10, 11, 15, 14, 23 and 24; there are no irregularities. I only notice one link. That irregularity of a link is between Sections 10
147 and 15; eighty chains and one link is the distance shown. On Section 4 there is no irregularity on the north or south lines. The east boundary line is seventy-nine chains and eighty links, making it twenty links short; the other, seventy-nine chains and fifty links, which would make it fifty links short. The error in Section 5 is, the east boundary is seventy-nine chains and fifty links, and the west boundary is seventy-nine chains and fifty-three links. The north boundary is eighty chains, and in the south boundary there is a thirty-links error shown in the measurement.

Q—Take the next township, Township 29 south,

148 Range 24 east. I understand that in all these cases running through there, the error, if any, is designated on the map?

A—Yes, sir. Those errors are occasioned on account of connecting with the original Government surveys on the exterior boundaries of the swamp lands, that is connecting on the east and west. In running these lines, I will first establish the township boundary, by connecting with the Government surveys on the outside; then I would run these section lines parallel to the boundary or township lines.

Q—Which line?

149 A—The section lines. That is the way all the lines are run on the subdivision of townships in Government surveys. I would run then as far as the swamp land would extend, even miles, and at the last distance I would connect with the original Government connections or corners, bending it as it might be.

Q—Have you made any measurements at all from the southeast corner of Section 28, in Township 29 south, Range 24 east?

A—Yes, sir. I ran south 17¼ deg. west.

Q—Was there any line there marked that you ran along?

150 A—The tules had been broken down; yes, sir.

Q—Did you follow that line where the tules were broken down?

A—Yes, sir.

Q—Did you, in making that line, come to any levee or ditch?

A—Yes, sir.

Q—How far was it from the starting point to that levee?

A—Eighty chains and thirteen links.

Q—Did you take the course of that levee?

151 A—Yes, sir.

Q—What was the course?

A—South 59½ deg. east; that was the general course of it.

Q—Have you, within the last month, run any other lines across the body of swamp land?

A—Yes, sir.

Mr. HOUGHTON—What I desire to do, without going into this at length, is to show that this witness has run lines across these swamp lands at the very points where the witnesses of the defendants have crossed it; not speaking of the levels at all, but where the other cross-

152 ings have been made. I will take this as any illustration, and make the offer, if your Honor please. I wish to show that this witness has run a line from the southeast corner of Section 24, in Township 27 south, Range 22 east, diagonally across Sections 25 and 35 to the southeast corner of Section 34 in the same township. And we offer to show by this witness, also, that he has made an examination of the natural object along that line. Then we offer to show by him what he found in running that line and making that examination, and on that line; that he has run a transit line across there, and that, if he found any slough or channel, he took elevations and
153 measured the width and depth of the slough or channel.

The COURT—Is that objected to?

Mr. FLOURNOY—Yes, sir; that is the same point.

The COURT—The objection is sustained.

Mr. HOUGHTON—Then, if the Court please, we make that same offer as to every single line that the defendants' witnesses have testified to where they have made a crossing of this channel of this swamp.

Mr. FLOURNOY—The same objection.

The COURT—The same ruling.

Mr. MCALLISTER—It is understood that we except all
154 along.

The COURT—Yes, sir.

Mr. HOUGHTON—Then we offer to show, if the Court please, that at each one of these lines where these witnesses of the defendants testify that they have crossed, not only has this line been run where they testified to, but that the line has been run by this witness from one half a mile to three-quarters of a mile on each side of that line and that an examination has been made between those lines as to all the channels and natural features of the country between the two
155 lines on each side of the line where the defendants' witnesses crossed; and in case he found sloughs or channels, or anything of that kind, they were levelled and the width of them measured.

Mr. HAGGIN—We object to that.

The COURT—The objection is sustained.

[Plaintiffs except.]

Mr. MCALLISTER—We think it will be proper, Your Honor, at this time to offer this Map (B) in evidence, as illustrative of the testimony so far as it has been testified to by various witnesses. There seems to be a great deal of discussion about Map, "B," having ever been put in evidence.

156 Mr. GARBER—All right; let it be in. We want it in.

Mr. HAGGIN—Only to the extent that the witnesses have testified about it.

Mr. MCALLISTER—Certainly. That is what I understand as to every map.

[Here insert Map B.]

Mr. HOUGHTON. Q—Have you within the last thirty days been on the Buena Vista Slough in a boat?

A—Yes, sir.

157 Mr. GARBER—I move to strike out that answer.

The COURT—The motion is granted.

Mr. HOUGHTON—We make the offer, if the Court please, to meet the testimony of Mr. Souther and Mr. Macmurdo as to the defect in the channel, and also as to the amount of water that will flow in that channel; to show that this witness has been on Buena Vista Slough, from Head-quarters or from Section 15, Norton's Camp, down to the Bonestell House; and we offer to show by him the width of the stream during that trip, and particularly at those points where they claim that there is no depth and the depth of the stream,

158 and particularly at those points where they claim there ia no well defined channel.

Mr. MCALLISTER—The whole object being to meet the testimony of Mr. Souther and Mr. McMurdo, as to special points on the slough.

The COURT—Gentlemen, it seems to me that this thing is progressing rather far. In the first place, as I have reiterated time and again, there has been testimony, cumulative, introduced by the plaintiffs in reference to those sloughs from Wible's Camp, in fact from Buena Vista Lake, down to the north line of Map

159 Number 2. You are seeking to go into this whole thing again, by this same witness who testified fully in reference to it before, and by other parties who testified before to having been in boats down that slough. It is but reopening the whole case again. I see no end to it. I think the Court has ruled sufficiently upon that.

Mr. MCALLISTER—We are only trying to do this: there were three points made by the other side; the levels, the crossings and the testimony of Mr. McMurdo. We want to offer as to each of the three points. There was no idea of making captious propo-

160 sitions at all. We just make the offer; it is ruled out and we except. There is no use dwelling upon it.

Mr. HOUGHTON—Have you ever, Mr. McCray, made a survey of Kern and Buena Vista Lakes, within the tule lines, to ascertain the areas of those lakes?

A—I have been connected with a survey of them; I made that survey of Kern and Buena Vista Lakes in 1878, in the spring—the winter or spring, January or February, along there. We made it by meandering the tules to clear water, in the clear water area, by getting inside of that and running around it. We followed the water line around, meandering by courses
161 and distances. We used an instrument. A man by the name of Loring and another by the name of Wright were with me. I made some notes of that survey; I don't know what has become of them; I don't know that I have seen them since 1878. Loring and Wright were two surveyors. The survey was begun about the first of January, and it took two or three months, as well as I remember; I think we completed the survey by April. I made that survey under the instructions of the Kern Valley Water Company, and followed the water line around. I know what the areas of those
162 lakes are in round numbers, and from my survey, from that survey, yes, sir.

Q—Now, I ask you what is the area of Buena Vista Lake, within the tule line?

A—Sixteen thousand acres. I also, at the same time, made a survey of Kern Lake in the same manner and on the same line. The area of Kern Lake was eighty-two hundred acres—that is, in round numbers.

A—In running that level across from the Harrold house, did you find more than one lake or pond on the south side of that line?

A—No, sir.

163 Q—The only one that you found was south of Station 132, that you referred to?

A—Yes, sir.

Q—I understand you have been at the point where Kern River forks—where the south and middle channels leave, and just above the Dixon ditch?

A—Yes, sir; I was there last March, or the first of April.

Q—Was there anything across the middle channel in any manner to obstruct the flow of water down there?

A—Yes, sir; it was a levee, and some posts with

164 brush between them; that was this year, 1881. Those posts were standing perpendicular in the bed of the stream; they were set in there, standing perpendicular; they extended nearly across the stream. I don't remember what the width of the stream at that point was. There was also a levee built connecting with that; it was built as any ordinary levee is, of dirt, of sand, built of the sand of the river. When I was there at that time water was running down there and the posts was still standing there, and the water was not running over the levee, but it was running between those posts, this brush and posts.

165 Q—Didn't the levee and those posts and the brush interfere with the free flow of water down that channel?

A—Certainly.

Cross-examination of

F. P. McCray.

By Mr. Haggin. Q—You say that the water was running beyond, lower down the channel than those posts?

166 A—Yes, sir. I don't remember how wide the water was running by there—the river. It was over a hundred feet, I suppose, considerably over a hundred feet. It is varying in width there; in places I presume it was less than one hundred feet.

By the Court. Q—Were those posts of recent work or old work?

A—They were new. The water had not passed to any consequence between them, I should not think.

By M. Houghton—The work had not been placed there a great while, evidently this year. I didn't notice what kind of material they were.

167 By Mr. Houghton. Q—Do you know the field that is fenced, near Head-quarters, where Norton lives?

A—Yes, sir.

Q—Do you know where the west line of that fence comes?

A—Yes, sir; it comes on the line between 8 and 9; that would be the west line of Section 9.

By the Court. Q—On the west line of 9, between 8 and 9?

A—Yes, sir.

168 R. T. HARROLD,

being called as a witness for plaintiffs in rebuttal and sworn, testified as follows:

My name is Robert T. Harrold; I am residing in the swamp. My house is about four miles east of Mr. Dover's on the opposite side of the slough, on this side.

Q—Do you remember sometime in April any parties coming nown to your house to do any work in connection with the survey of that swamp?

169 A—Yes, sir.

Q—Who were they?

A—Mr. Fillebrown and Mr. McMurdo. They are surveyors, I believe.

Q—Anybody else?

A—Mr. Dixon and Mr. Jackson, I think, were the other gentlemen's names. That was somewhere just before the first of May, I think; the first of May and the last of April. I couldn't say exactly the date.

Q—Did you show them at the time any post or corner?

170 A—I showed them. They inquired of me if I knew where there was a post or corner, and I told them; I went and showed them where I had found one some time before that. I told them that I had picked up one, and went and showed them as near as I could the place that I had found this post. That point was very nearly one hundred yards from my house.

Mr. HOUGHTON. Q—After showing them that corner what did they do there?

A—They started a line from there.

Q—From that point?

A—Yes, sir; they set their instrument there and

171 started from that point.

Q—At that point?

A—Yes sir; that is, I went with them out there and showed them the place, and we went back to the house. Well, they went out again, and some of them, when I left my camp, were probably off a couple of hundred yards, and the others were at the place that I showed them. They set a conpass there. I went out and showed them the place. I saw them set the instrument. They left the instrument there while they went to the house. That was the compass.

Q—At the point that you showed them?

172 A—Yes, sir; we went back to the house. They all went out. I did not go back with them again. When I left the camp there was some of them off a couple of hundred yards, and there was some of them at the place I had showed them where the post was.

Q—Have you ever been over the course since then?

A—I have.

Q—Where those men were going?

A—Yes, sir.

Q—What did you find in going over the course where they were going?

Mr. FLOURNOY. We object. Don't answer that ques-
173 tion.

The COURT. The objection is sustained.

[The objection is withdrawn.]

Mr. HOUGHTON. Q—You say you went across there. In going across there, did you find the drag-line started and continued right from that post across the swamp?

A—As soon as I got to the tules I could find the drag-line, right from the point where they started.

Q—And that continued straight across the swamp?

A—And that continued straight across the swamp. About three days after they ran the line I went a part of the way through there.

174 Q—Did you ever at any time see another party come down there to make surveys at that point?

A—Yes, sir.

Q—Who?

A—Mr. McCray and two of the Mr. Smiths and Mr. Wright. That was last Saturday a week ago.

Q—Did you show them the point that you had pointed out to Mr. Fillebrown and Mr. McMurdo, and others?

A—I did.

Q—Did they, in making their surveys, start from that point?

175 A—Yes, sir.

Q—What did they find at the point that you pointed out to them?

A—Found a stake there; that is, a peg, drove in the ground.

Q—How was that stake—level with the ground?

A—Level with the ground; and they started from that point to make the survey; the point that I showed them.

176 Cross-examination of

R. T. HARROLD.

By Mr. HAGGIN. Q—Was that stake there when you saw that place? Was the stake at the place you showed Mr. McMurdo and Fillebrown?

A—It was at the same place.

Q—Answer my question; was there a stake there at the point when you showed it to Mr. McMurdo and Fillebrown?

A—No, sir; the stake was not there. I did not show
177 Mr. McMundo and Mr. Fillebrown any stake there. I didn't see anybody drive the stake there. I saw the stake there.

Q—You saw the stake there, but don't know anything about it?

A—I saw the stake there after he went away.

Q—After who went away?

A—After Mr. Fillebrown went away.

Q—How long after?

A—I didn't notice. I was not there for quite a while after they left, eight or ten days.

Q—About this drag-line, did you see Mr. Fille-
178 brown or Mr. McMurdo or any of that party make a drag-line through there?

A—I did not.

Q—You said you could not follow it from this point that you had shown them. How far was it from that point when you struck the drag-line?

A—About three hundred yards away from that point.

Q—Do you know of your own knowledge that Mr. McMurdo and Fillebrown started a survey from the point that you designated to them?

179 A—I saw a portion of the crowd on the survey. I didn't see them go through the line.

Q—Well, you don't know yourself of your own knowledge that they started that line, that they ran from that point?

A—I saw them at the stake. Saw a portion of them there and a portion of them off a couple of hundred yards.

Q—Did you see them start the survey there from that point?

A—I saw them start their instrument there. That is just about as much as I can say.

180 Q—Do you know that that was the beginning of the survey that they made?

A—I saw them set their instrument.

Q—Will you just answer my question, yes or no, whether you know whether that was the beginning of that survey they made there?

A—Well, I don't know.

Mr. HAGGIN—That is all.

Mr. HOUGHTON—In connection with this witness we desire to make an offer of his testimony as to his accompanying Mr. McCray when he ran this line across at these different points where the witnesses of the de-
181 fendants have testified that they went, and also on the side line half or three-quarters of a mile each side of that, and that he also accompanied Mr. McCray when he ran along any channel of water or slough that they may have found on those lines between those points.

Mr. HAGGIN—We object to any testimony of that sort.

[The objection is sustained, and plaintiffs except.]

W. P. ESTEE.

182 Being called as a witness for plaintiffs in rebuttal and sworn, testified as follows:

I reside on the swamp when I am at home, at the Adobe Holes. My camp is there. I have been there about three months, or nearly that. Before I went to the levee there I resided at Dover's camp for nearly five months; I think a little over; may be five and a half. Before I went to Dover's camp I was stopping at Mr. Crocker's, down here on the Island. I went from Mr. Crocker's down to Dovers' place about the 22d of September, I think it was, 1880.

183 Mr. HOUGHTON. Q—Did you at any time during the month of April see any parties by your camp in buggies and getting across that swamp?

A—Yes, sir.

Q—Who were they?

A—Captain Taylor was there, and Ed. Cross and Vining Barker and H. A. Jastro. They stopped at my house.

Q—Where did they go from your house?

A—They went on the Abobe Holes Slough. They left my place first. They then went to the Round Corral.

184 Q—Did you go with them?
A—I did.
Q—Did you act as a guide in taking them across there?
A—Yes, sir.
Q—What did you see when making that crossing there with those parties as regards sloughs or channels?
Mr. HAGGIN—We object to the question.
The COURT—The objection is sustained.
[Plaintiffs except.]
Mr. MCALLISTER—We would like to state, your
185 Honor, that we offer this testimony in a two-fold point of view: first, to contradict these witnesses of the defendants, so far as this witness would contradict them as to what occurred on that trip; and secondly, in reference to the natural objects which they encountered, the physical objects which they encountered.
Mr. FLOURNOY—There is no objection to proving that they didn't make the trip, so far as that is concerned. Anything that tends to re-establish the original case as to channel or slough, we object to.
Mr. HOUGHTON. Q—How long were you with those
186 parties, and between what points?
A—Going across to this Round Corral?
Q—Yes, sir.
A—I suppose I was with them an hour, or something like that, going across to that point.
Q—Where were you when you joined them?
A—When I went with them they were below my house about half a mile, at the pump, the Adobe Hole pumps, and from there I went all the distance to the Round Corral with them.
Q—Have you been on this swamp land at any point north of the Tule House recently?
187 A—Yes, sir; I was there last Saturday, I think.
Q—How far north?
A—Well, I was about three and a half or four miles; it might have been three and a half, may be four. I am not positive as to the distances.
Q—Did you find at that point water running in a channel or slough?
A—Yes, sir.
Mr. HAGGIN—Strike that answer out.
The COURT—Strike it out.
Mr. HAGGIN—We object to the question.
The COURT—The objection is sustained.

188 Mr. HOUGHTON—If the Court please, in connection with this we desire to show: Your Honor will remember that the testimony in this case shows where the water was when we closed our case, running down through this body of land. As I remember it, our testimony was that the water had reached Section 33, about eight miles south of the Tule House. Now, we desire to show by this witness what we certainly could not have shown when our case was closed: that he followed this channel down from the point where the water was at that time, and found running water in the slough four miles, or three miles and a half, north of
189 the Tule House. We could not have proved that fact at that time, because it did not exist. Further, we desire to prove it to contradict the testimony given by Captain Taylor, that he crossed about a mile below the Tule House, and there was no channel.

[The proposed testimony is objected to by the defendants. The objection is sustained and the plaintiffs except.]

Mr. HOUGHTON—If your Honor please, that we may not take up the time of the Court, we desire to call other witnesses, in connection with those trips made by
190 Mr. McCray and Harrold, which we have offered to show, crossed this swamp at various points where the defendants' witnesses crossed; that they have accompanied Mr. McCray on those trips; and further, to show what they found on them. We make that offer as to this witness, and we wish to save calling those witnesses. It seems to me that we might as well name our witnesses.

The COURT—Name your witnesses.

Mr. HOUGHTON—Then we offer to prove that state of affairs by the following witnesses: J. H. Huntley, John Beard, A. Noble, T. A. Stoutenburgh, John Sturgeon, Robert Burgen and J. T. Williams.

191 [The Court makes the same rulling as to the last offer made in connection with the testimony offered on the stand, to which ruling the plaintiffs except.]

Mr. HOUGHTON—Then, if your Honor please, we offer to show by John Beard and J. H. Huntley, that they accompanied Mr. McCray on the trip which he made in a boat, down this slough from Head-quarters to the Bonestell house; and further, to show what they found as to the depth and width of that channel on that trip.

Mr. HAGGIN—We object to that.

192 The COURT—The same ruling.
Mr. HOUGHTON—And the plaintiffs except.

S. W. WIBLE,

recalled for plaintiffs in rebuttal, testified as follows:

By Mr. HOUGHTON Q—Have you recently been at a point on Kern River where the North and Middle or South Forks branch, ten or twelve miles this side of Buena Vista Slough?

193 A—I was there about the first of April, on the New River.

Q—Was there any obstruction in the Middle Fork at that point to prevent the water running down that channel?

A—Yes, sir; there were stakes, brush and hay, and at each end there was a levee where it extended to high ground.

Q—How far into the river did that extend? What portion of the river did it extend across?

A—Extended clear across.

Q—Was there water running at that time?

194 A—Yes, sir, a little, and the obstructions were still standing there.

Q—How was the water running?

A—Well, it was, of course, running through this brush and hay. There was one place where it had broke out. The stakes were willow stakes, driven or set into the bed of the river. They were different widths apart; some of them closer than others; two, four, five or six feet, probably.

Q—Did those, and the levee in connection with them, and the brush, in any manner interfere with the

195 free flow of water down that channel?

A—Yes, sir.

Q—Do you know anything about the weir at Cole's Bridge?

A—Yes, sir.

Q—Has that levee or the weir in any way obstructed the free flow of water from the lake since the break of last February?

A—No, sir; not since—not since the flow of water has been enough to wash the obstructions out. I took all the lumber out; took the gates out. I think that was in February; I can't state just exactly. I took

196 the timbers out of the gate about the first of January, 1881. It was obstructed then for a time until the rise in the river; until this break occurred.

Q—Since the last break, has there been any obstruction?

A—No, sir.

Q—Do you know where the levee runs along Buena Vista Slough, northeast of the Head-quarters Camp, across the land of Mr. Crocker?

A—Yes, sir. That levee follows the general course of the slough.

Q—But does it follow the bank of the slough?

197 A—No, sir.

Q—Will you look at that Map "D," and see "Central Cut," marked on that?

A—Yes, sir.

Q—Was there ever any work done on that cut running where that is marked, in connection with that channel?

A—No, sir.

Q—Do you know a levee or channel on the same side of the slough and not far from that point?

A—Yes, sir.

Q—How far is that levee from that point where

198 that central cut is marked?

A—It is some distance from it.

Q—Where does it run to? Where does the eastern end of that channel, or of the levee run to?

A—It goes to the East Side Canal, and runs down towards Buena Vista Slough.

Q—Does it get to Buena Vista Slough at all?

A—No, sir; not altogether.

Q—Where does the water that runs from the Eastern Canal—the East Side Canal, you call it, discharge itself?

199 A—It discharges into—a portion of it, south of this levee, and runs eventually back into Buena Vista Slough.

Q—Is the levee which you have referred to on the east side there, what is known as the Souther Levee?

A—Yes, sir.

Q—How was that weir at Cole's bridge constructed?

A—In regard to the gate?

Q—Under the bridge. How was the weir constructed?

A—It was originally constructed with perpendicular gates, upright gates.

200 Q—Was there ever any other kind of gate put in there?

A—Yes, sir; temporarily, there was a break occurred in one side of the upright gates, and to improve it, to repair it, it was easier to put in these temporary gates on an incline, and they were put in for that purpose.

Q—Have you ever noticed the flow of sand or sediment in Kern River, or Buena Vista Slough?

A—Yes, sir.

Q—Have you noticed the flow of sediment or sand in Buena Vista Slough?

201 A—Yes, sir.

Q—How far did you notice that sand or sediment flowing, at what point?

A—Well, I have noticed it at different places along, from my head-quarters down. I have noticed it twenty miles below my head-quarters. One point is at the break, the lower break.

Q—What effect has that sediment or sand which flows through that lower break upon the channel runing there, Buena Vista Slough, or upon the channels running through the swamp land?

202 [Objected to by defendants on the ground that it is a part of plaintiffs original case, and not proper in rebuttal.]

[The objection is sustained and plaintiffs except.]

Q—Have you ever seen sand or sediment flowing through and along Buena Vista Slough, at a point below the weir at your head-quarters?

A—Yes, sir.

Q—What effect has that sand, if any, upon the channel at a point below your head-quarters?

Mr. HAGGIN—We object to that.

The COURT—The objection is sustained.

203 [Plaintiffs except].

Cross-examination of

S. W. WIBLE.

By Mr. HAGGIN. Q—Mr. Wible, you spoke of seeing a levee at the head of the Middle Fork of Kern River. Did that levee extend completely across the river?

A—Yes, sir; it went from the sand-bar across.

Q—From what sand-bar?

204 A—From the sand-bar on the north side, almost to the bank on the south side.

Q—Almost?

A—Yes, sir; it was there—it was higher ground. The main bank is what I mean.

Q—Was the brush all across there?

A—Yes, sir; except at the south end—or the north end, where the sand levee was thrown across. The sand levee was thrown into the north end. That levee was just below the fork of the North and South Forks, a short distance, probably one or two hundred yards, somewhere along there—probably one hundred yards, 205 may be a little more or a little less, but I think about one hundred yards.

Q—You said a little water was flowing past that, down the channel of the middle branch. How much do you suppose?

A—Well, not a great deal; I noticed it below the obstruction, and it was probably spread over the bottom of the river about seventy-five feet, more or less, and four or five inches deep. It was just a very smooth stream running, about seventy-five feet wide, and about four or five inches deep—probably something like that. I can't be positive as to the time, but I 206 think it was about the first or second or third of April, somewhere along there, about the first of April, 1881. Mr. McCray was with me.

THOMAS N. WILLS,

being called as a witness for plaintiffs in rebuttal, and sworn, testified as follows:

By Mr. HOUGHTON. Q—Where do you live?

207 A—When I am at home I live on the Island; but I stop on the swamp a good deal. My father lives in the swamp; he stops there a good deal with the hogs, about two miles this side of Dover's and on the opposite side from Dover's.

Q—Did you see any parties driving around in that locality in buggies, three or four weeks ago?

A—Yes, sir.

Q—Who were they?

A—Mr. Thornton, Mr. Taylor, Mr. McClung, Mr. McLane, Pat Murray and Mr. Reading.

Q—Were they at your father's camp?

208 A—Yes, sir; they passed by there, and from there they went out into the swamp?

Q—Did you go with them?

A—Yes, sir.

Q—As a guide?

A—Yes, sir.

Q—How far did you go with them?

A—I took them pretty nearly a mile, and they turned back—about a mile and a half, I think, out into the swamp.

Q—What made them turn back?

A—They came to a slough—

209 Mr. HAGGIN—[Interrupting] I object to that as immaterial.

Mr. FLOURNOY—I move to strike out the answer.

The COURT—The motion is granted.

Mr. MCALLISTER—What is the question we have asked?

The COURT—The witness answered it, and it has been stricken out on a motion.

[Plaintiffs except.]

Mr. HOUGHTON. Q—What did they say, if anything, at the point where they turned back?

A—They talked like it was boggy. Mr. McClung
210 first spoke about turning back; he said that they wanted to go over to the road across the swamp. He didn't say anything to me; they were talking to themselves.

By the COURT. Q—Have you named all of the parties who were there?

A—Yes, sir; six of them.

Mr. MCALLISTER. Q—State what any of the parties then and there said. Do you recollect that they said anything?

A—Not to me.

Q—Among themselves what did they say, any of them?

211 A—They were talking among themselves, and I could not hear what they said.

Q—Did you hear any of them say anything?

A—No, sir; not that I could hear.

Q—You started to say something that Mr. McClung said?

A—They objected to it.

Mr. HOUGHTON—Go on and tell what Mr. McClung said.

A—He talked as though he didn't want to go—

Mr. MCALLISTER—[interrupting] That's right; give

212 the substance of it, if you cannot recollect the words.
Mr. GARBER—We object to that.
The COURT—Give us the language; tell what he said. What did Mr. McClung say?
Mr. MCALLISTER. Q—Do you recollect what he said?
A—No, sir.
Q—Did he say anything?
A—He didn't say anything to me; I didn't hear what he said; they were talking.
Q—Did you hear anything that was said among themselves, by any one of them?
213 A—Well, I didn't hear much, only about the slough; that is all that I heard.
Mr. HOUGHTON—What did they say about the slough?
A—They said it was boggy, and they would rather not cross it; and they told me to take them back across the swamp, back towards Harrold's camp.
Q—Where were you when they said this?
A—I was right out in the swamp, about right south of Harrold's camp.
Q—Were you ahead of them?
214 A—Yes, sir; I was ahead just a little ways, may be thirty or forty yards.
Q—Were you in the slough when they said that?
Mr. HAGGIN—We object; it is simply a question of what he heard.
The WITNESS—I went into the slough.
Mr. HOUGHTON. Q—You were on horseback?
A—Yes, sir; I was on horseback.
Q—Did you drive into the slough yourself?
A—Yes, sir.
Q—How deep was the water there?
A—I could not tell how deep, but it almost swam me
215 on horseback.
Q—Was it after you had driven in there that these remarks were made by them?
A—Yes, sir.
Q—What did they say?
A—They said they had rather turn back.
Q—Did you come out then?
A—Yes, sir; I came out then. I went on and crossed and then turned and came back, and led them back to the tules.
Q—Did you in going out there with them cross any sloughs?

216 Mr. HAGGIN—I object to any testimony of this witness—

By Mr. HOUGHTON (interrupting). Q—In going out there did you take them across any sloughs?

Mr. HAGGIN—We object.

[The objection is sustained and plaintiffs except.]

Cross-examination of

THOMAS N. WILLS.

By Mr. HAGGIN. Q—Where did you say you first
217 started from?

A—When I first started to take them, from our hog camp at Broder Island.

Q—Where were you when they made these comments that you spoke of, and said they had rather turn back?

A—I was right in ahead of them in the slough, about thirty yards. Colonel McClung, I believe, first spoke. I heard him say that they had rather turn back. They were talking among themselves.

Q—You heard Colonel McClung say he had rather turn back?

218 A—Yes, sir.

Q—Did you hear anybody else say that?

A—Not until afterwards. They made it up and they said they had rather turn back.

Q—Who else did you hear say that?

A—Dr. Thornton next. Mr. McClung spoke to Dr. Thornton.

Q—How many were there together when this remark was made?

A—They were strung out in three buggies, two in a buggy. They drove up right close together. They
219 were traveling along twenty or thirty yards apart.

Q—When did you know Dr. Thornton?

A—I have not been much acquainted with him.

Q—When did you first see him?

A—About three years ago.

Q—When did you first see Mr. McClung?

A—About a year and a half ago.

Q—When did you first see Mr. McLane?

A—About two or three years ago, or two years and a half ago.

Q—When did you first see Pat Murray?

A—I saw him at Delano one time before.

220 Q—Who else was there in that party?
A—Mr. Reading.
Q—Did you know him.
A—Yes, sir. I got acquainted with him last summer, or saw him last summer.
Mr. McAllister—What is your age?
A—Fifteen years old.

L. L. Dixon,

being recalled for plaintiffs in rebuttal, testified as follows:

221 Mr. Houghton. Q—I understood you, when you were on the stand before, to testify that you had for some time been in the employment of the State Engineer's Office?
A—I did, sir.
Q—During what years?
A—1878, 1879 and 1880. My duties were sometimes to chain, sometimes to run a level rod, and also I kept water gauges. That was about all, except taking statistics.

222 Q—What statistics did you keep in connection with that employment?
A—The amount of irrigated land, the number of times it was irrigated; that is about all. A part of my duties was to keep the water gauges in the canal. I generally also made notes of the condition of the river banks and canals.
Q—Did you, at the time you performed these duties, make any memoranda in regard to it?
A—Yes, sir, and also measurements of water. Some of them were made from the weir. They were kept in a book. Books were furnished me for that purpose.

223 I had one book for the gauges every month. I kept three books.
Q—What were the other two?
A—One was statistics as to the irrigated lands, crops, and so forth. The third one was a diary. I believe we had the evaporation record in it, too, and temperature. All of those records were kept and made at the time the observations were made. In the diary, sometimes, I would not put it down at the time of reading it, but sometimes I left it in town, and I noted it down immediately afterwards, when it was fresh in my memory.

224 Q—Are all of the entries in those several books correct?

A—I don't remember all of them. In the book of statistics the memoranda are only approximate, that is all. In the book of statistics, I think, I kept the names of the persons, the sections, townships and ranges, the number of acres in cultivation, the number of acres irrigated, and the number of acres in orchard, vineyard or garden.

Q—What do you mean by saying that the estimates were approximate only?

A—I got them from the parties. I didn't measure
225 the land or know anything except what people told me. I didn't go over the land at the time. Sometimes I would be in Bakersfield, and catch a man in from his ranch, and ask him what he had on it. It was a part of my duties to keep those statistics. I did it at the request of Mr. Schuyler. When I got through with those books I sent thom to Mr. Schuyler. I got the names of the several parties who irrigated from the several canals. I got the number of acres owned by them from the record, and the number of acres irrigated by them I got from themselves. I don't know
226 how true it is. I got the names of those who irrigated by going around to see them. I would go to the Secretary or the owner of the different canals to get the names of them; sometimes went along the canals, too.

Q—Did you, in fact, ascertain who did irrigate from those canals at that time?

A—I did, as near as I could. That is what I was put there for.

Q—You kept a memorandum of them?

A—I sent the record to Mr. Schuyler.

Q. [Showing a book to the witness]—Is this the record?

227 A—It looks like it. That is it.

Q—Do you remember this data now, as to who irrigated from these canals, and the amount of land irrigated?

A—I can approximate the amount of land, I think, the number of acres of land; but I won't swear to my estimate about it. I don't remember as a fact the information I got at that time.

Q—Could you testify as to the facts, what parties were irrigating and the amount they irrigated without the use of that book?

A—Not well; I don't know that it is correct. I don't remember the facts now.

228 By Mr. HAGGIN. Q—Are these entries all in your handwriting?

A—I don't know whether they are or not; I can tell by looking over it. There is some writing in the book that I did not put there at all. There are figures and notes there that are not mine. Some of it is mine. This book purports to be a memorandum of observations of the different canals, the amount irrigated from the different canals. [After examining the book.] Yes, sir, that is what it is. I didn't make all these observations myself that are noted down in this book; that is, I didn't go round to each person. There is a good
229 deal in there that persons told me. A great many times I could not get around to the places, and I would ask them, and put it down.

By Mr. HOUGHTON. Q—This book is for the season of 1880, is it?

A—Yes, sir.

Q—Are all the entries in those two pages in that book in your handwriting?

[Showing the book to the witness.]

A—All of that in ink is mine. I don't know of my own knowledge who irrigated land from the Beardsley Canal in the year 1880.

230 Q—Could you tell by having this book to refresh your memory?

A—I could tell what names I put down there.

Q—Will you give me the names of the parties who irrigated from the Beardsley Canal in 1880?

A—The names in the book were not all put down from my knowledge of the people. Some of the men I never saw at all.

Q—Do you know as a fact that these parties whose names are in the book did irrigate at all from that canal?

231 A—I could not know without seeing it. I never was out to the end of the canal. I don't know as to that of my own knowledge. I was not over the land. Some of them I saw irrigating; others I did not.

Q—Do you know how many parties irrigated from the Beardsley Canal during that year?

A—I could count them up, may be, all that I know.

Q—It was your duty to find out who irrigated from all those canals?

A—That was not exactly a duty; it was just for Mr. Schuyler's own benefit; it was not connected with the State. He just took them, I suppose, as a little outside

232 business. It was a part of the duties required of me by Mr. Schuyler. He used to ask a good many things of me that I did not do, and that was one of them.

Q—Who, during that year, irrigated from the Beardsley Canal?

The COURT—The witness can answer if he knows of his own knowledge.

A—I can tell you whom I saw irrigating though. I saw those people east of Roberts' irrigating, Mr. Flippins, Mr. Darnell. Mr. Wilson, Mr. Castro—I think he was not there—Mr. Starr, Mr. Vaughn, Mr. Roberts, and a man by the name of Smith. Those are all I know
233 who were irrigating from that canal. Mr. Donaldson irrigated from that canal; he is one I had forgotten. I never saw James irrigate. I think he irrigated; I never saw it. I know Mr. Kelly and his place, but I never saw any irrigation going on there. Mr. Beardsley, I think, I omitted; I saw him irrigating.

Q—Do you know how many parties did irrigate from that canal?

A—I have got all of the names down there. I got them from different parties. I don't know of my own knowledge. I don't know whether any parties who are not named in this book irrigated from that canal. If
234 a man had told me the truth about it I might have known. I tried to ascertain all the parties who irrigated from that canal.

Q—You would have known it if parties irrigated there?

A—I would have known it if anyone told me.

Q—You didn't try to ascertain at all?

A—I never went off my works on that side of the canal.

Q—Did J. B. Haggin irrigate any land from the Beardsley Canal, or any of his tenants?

235 A—I am not positive. He owned land over there, but I never saw it being irrigated. I suppose it was irrigated from it. I never saw the water running over the land.

Q—Do you know whether or not he irrigated any in Section 15, Township 29 south, Range 27 east?

A—You will have to give me a map to look at. I am not well enough acquainted with the sections.

[Map D is shown to the witness.]

I could not answer to it, because there is nothing here for me to start from.

Q—Does it appear from that book, in your handwriting, that he did?

236 A—Yes, sir. Mr. Schuyler told me to ascertain these things in going around to the water-gauges.

Mr. HOUGHTON—We ask leave, for the time being, to withdraw the witness now on the stand, and recall him at some future time, and go on now with other witnesses.

NELLIE A. BARKER.

being called as a witness for plaintiffs, in rebuttal and sworn testified as follows:

237 I reside on the Rio Bravo Ranch, on the Kern River in this county.

By Mr. HOUGHTON. Q—Have you at any time kept a record of gauge readings, kept upon that ranch?

A—I have.

Q—Have you that record with you?

A—Yes, sir.

Q—Do you remember what those gauge readings were, without that record? As a matter of memory do you remember them?

A—No, sir.

238 Q—Were those readings made at the time you took them?

A—Yes, sir; when they were fresh in my memory; and they are correct. I have them with me. [Witness produces them.]

Q—Is this the original record kept by yourself, or a portion of it?

A—Yes, sir.

Q—Were those records or measurements taken at the time they purport on those papers to be?

A—Yes, sir; and on the days they purport to have been taken. I took a portion of them, those that are
239 marked as kept by me. Those that are marked with my name were kept by me. Some were kept by my sister, and those are marked with her name. I made that mark about a week ago, to know which records my sister kept. They have been kept separate from mine. All that she didn't keep, I kept myself. I was at the ranch at the time all of those records were made, and put down every single one of them. I didn't miss one. I was not always there at four o'clock, and some one else took the temperature for me at four o'clock, and I put it on the record. It was never more than an hour's difference from four o'clock.

240 The gauging was always noted by myself. There never was more than an hour's difference from four o'clock. Perhaps a dozen times it was five o'clock, and at those times I took them myself. That paper was made out at the date it bears date. It was kept on the Rio Bravo Ranch. I forwarded to Mr. Schuyler a book in which the record was copied from that paper.

Mr. FLOURNOY—We think it due to the Court, if counsel have got any reason for offering this testimony that addresses itself to the discretion of the Court, as to its being rebuttal testimony, to state what it is to rebut. We object to it on the ground that it is
241 not proper evidence in rebuttal.

Mr. HOUGHTON—I desire to show in rebuttal the full amount of water flowing in Kern River, during the years to which the testimouy in this case relates.

The COURT—I will sustain the objection that it is not rebuttal.

[Plaintiffs except.]

Mr. HOUGHTON. Then with a view of fixing this record as to this witness and another one, who has kept the balance of this record, we make the offer to show the gauge readings kept by this witness and her
242 sister, Miss Lottie Barker, between the 23d of March, 1879, and the present time at the Rio Bravo Ranch in this county.

The COURT—Do you offer it as rebutting testimony?

Mr. HOUGHTON—I offer it as rebutting testimony.

Mr. MCALLISTER—And in connection with that, we propose to show the calculations of Mr. Schuyler based upon this.

Mr. HOUGHTON—We propose to show by these two witnesses that Miss Nellie and Miss Lottie Barker have kept this record down to the present time, a record of each day's reading of that gauge. We do not
243 offer the record, but offer her testimony, and to allow her to take the record to refresh her recollection as to these gauge readings, and then her sister in the same way; and we will follow that up by Mr. Schuyler's testimony, and show the volume of water running by there at that time.

Mr. FLOURNOY—We object to that as not rebuttal.

[The objection is sustained and plaintiffs except.]

244 S. M. JUDD,

being called as a witness for plaintiff in rebuttal and sworn, testified as follows:

I reside on Kern Island, nine miles from Bakersfield. I know the Calloway Canal. I, in 1879, visited the head of that canal.

By Mr. HOUGHTON. Q—Did you at any time during 1879 see a wing dam thrown across the river there, throwing all the water flowing in Kern River into the Calloway Canal?

245 Mr. HAGGIN—We object to it, because they have tried to establish that by the testimony of Mr. Willow and others.

[The objection is sustained and the plaintiffs except.]

Mr. HOUGHTON—We make the offer to show by this witness, and also by John Garlick and G. K. Ober, that at some time, and several times, during the year 1879 a wing dam was thrown across Kern River at the head of the Calloway Canal, which threw all of the water running in Kern River into the Calloway Canal, so that no water ran below.

246 [The same objection, the same ruling, and the same exception by plaintiffs.]

The COURT—I think the defendants' witnesses themselves admitted the construction of a wing dam to turn the water there.

JOHN MORTER,

Being called as a witness for plaintiffs in rebuttal and sworn, testified as follows:

247 I reside on New River, in this county, fifteen miles from Bakersfield. I know the Calloway Canal.

By Mr. HOUGHTON. Q—Did you at any time in the year 1880 cross the Calloway Canal?

A—Yes, sir; I crossed it in May, July and August.

Q—When did you cross it in July, and what was the condition of the water in the canal?

A—It just came over my horse's back.

[Defendants object to the testimony as cumulative and not in rebuttal.]

Mr. HOUGHTON—We offer to show by this witness that in July, 1880, he crossed the Calloway Canal, and

248 that it was full and swimming, and that he continued on down and crossed the river at his house below the Pioneer Bridge, and that there was no water under the Pioneer Bridge at all.

Mr. HAGGIN—We object to the whole thing as being simply cumulative evidence upon a matter into which they have gone already.

[The objection is sustained and the plaintiffs except].

E. M. CROCKER.

249 being called as a witness for plaintiff in rebuttal, and sworn, testified as follows:

I reside nine miles south of Bakersfield. I have recently been on Buena Vista Lake; I was there last Wednesday.

By Mr. HOUGHTON. Q—Did you notice the condition of the water in the lake at the time?

A—I did; I crossed at the upper bridge, at the head of the slough, right below the mouth of Buena Vista Lake, at what is known as Cole's Bridge. I went from there to a place of mine in the mountains. I crossed
250 right over the Buena Vista Hills, and went along near the margin of Buena Vista Lake. After I crossed the hills I went down to the water in the lake. There was a good deal of water in the lake. It came up within half a mile of the road where I went in. I have been well acquainted with Buena Vista Lake since 1868. I have seen it at all stages of water; seen it when it was full. I have seen it when the water was running out of it, and running down Buena Vista Slough.

Q—Do you know how high the water must be before it will run out, and down Buena Vista Slough?

251 A—I know where the water stands around the lake when it did run out.

Q—How near to that point had it reached, when you saw it a few days ago; to the point where it was high enough to run out of Buena Vista Slough, and towards Tulare Lake? How much would it have to rise?

A—I didn't level it, but I should judge the lake would have to rise about three feet to take it up to that place, three feet vertically, may be more or less. I saw the lake last fall. It was dry; no water in it. I saw it from where I crossed the hills, and there was no water in it.

252 Cross-examination of

E. M. CROCKER.

I crossed the slough at Cole's Crossing, the upper crossing, and went into and over the Buena Vista Hills, and from the top of these hills I could see below the lake. The water in the lake would have to rise about three feet higher before it would run out. I crossed on Cole's Bridge, which is two or three miles to the left, and went down straight to the lake at the western
253 end. There is a road runs round the lake. It used to be so that the water would run through the slough and come up very near to this road; now it is nearly half a mile where I went in. That is the road to San Emidio. There are two roads; one runs into the other and forms one road that runs around the lake. The one that I speak of went by the road that runs over the mountains, that meets the other one; that connects with it. The water was about half a mile from the road. I rode in there to see if I could find a place to water some sheep. I judge it was about half a mile from the road in to the water, where I went in.

254 By Mr. HAGGIN. Q—What means had you of forming any estimate of the amount that it would have to rise before it would flow out?

A—Just my own judgment, in judging from the lay of the land and the amount of water that I had seen in there. I should judge that the water would have to rise about three feet to take it up to the road where I was. Three feet more of water than there is in the lake at present would, in my opinion, fetch it up very nearly to the road, if not quite to it. I base my opinion upon good common sense, a man's judgment, without levels. I should judge three feet would fetch it up
255 pretty nearly there.

By Mr. HOUGHTON. Q—What was the extent of the water in that lake as you saw it there, the width and length, when you saw it last?

A—I don't know the size of the basin of the lake, but it was a large body of water. The lake was pretty well filled.

By the COURT. Q—That is Buena Vista Lake?

A—Yes, sir. There was a large scope of country, grown up with willows, that was dry last year, that is all full of water now.

256 Mr. HOUGHTON—We offer in evidence a certified copy of a certificate of purchase from the State land office, dated the 30th of September, 1872, signed by Robert Gardner, Surveyor General of the State of California, for all of sections 5, 10, 11, 12, 13, 14, 24 and 25, also portions of sections 4, 6, 8, 9, 15, 22, 23, 26 and 35, in Township 25, South Range, 21 east, Mount Diablo Meridian, in favor of Richard H. Stretch, with the assignment endorsed thereon.

There is no assignment on it. It is a certified copy from the State Land Office. This is a portion of the land in the complaint described, and in the patents
257 which we have offered in evidence.

Mr. HAGGIN—What is the object of this?

Mr. MCALLISTER—To show the time that our grantors first became interested in this land, showing when our equity in this land commenced. To show when our inchoate right or equity originated. We want to prove whatever title this certificate gave; and it is rebuttal to the appropriation of the Calloway. They put forward that title and we answer it by these certificates. We propose to show the issuance of these certificates to certain parties, and the assignments from those parties to the plaintiffs, and then the issu-
258 ance of the patents in pursuance of these certificates. We seek to show that we acquired an inchoate interest in these lands at the date of these certificates and the point of time we became interested in these lands.

Defendants object on the ground that it is irrelevant, immaterial, incompetent and not proper testimony in rebuttal.

The COURT—If it is simply offered as rebutting testimony I shall have to sustain the objection.

The plaintiffs except.

Mr. HOUGHTON—I desire to have these marked. I think I stated the date of this certificate and what it
259 contained. It is a certified copy, certified to by James W. Shanklin, Register of the State Land Office, on the seventh day of May, 1881. There are quite a number of these certificates. The number of this one is 3,775. I desire to have it marked as an exhibit.

It is marked

"PLAINTIFF'S EXHIBIT 43,"

and is in the words and figures following:

260 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA
"No. 3775.

"SACRAMENTO, 30th day of September, 1872.

"It appearing from the report of the County Treas-
"urer that on the 6th day of August, A. D. 1872, Rich-
"ard H. Stretch paid to the State of California the sum
"of twenty-one hundred and fifty-six $\frac{85}{100}$ ($2,156\frac{85}{100}$) dol-
"lars, being twenty per cent. of the purchase money
"and first year's interest on the balance for 8,880 acres
"of swamp and overflowed land, described as follows, in
261 "Survey No. 233, Kern County: All of Sections 5, 10,
"11, 12, 13, 14, 24 and 25; also portions of Sections 4,
"6, 8, 9, 15, 22, 23, 26 and 35, in Township No. 25,
"South Range No. 21 East, Mt. Diablo meridian. Now,
"therefore, be it known that the said Richard H. Stretch,
"having made payment of said twenty per cent. and
"first year's interest for the above described tract of
"land, is the purchaser of the same; and, after having
"in all other respects complied with the requirements
"of the laws providing for the sale of said lands, and on
"surrendering this certificate to the State of California,
"and after the said lands have been confirmed to the
262 "State, the said Richard H. Stretch, or his assigns,
"shall be entitled to receive a patent for the same.

"In witness whereof, the Register of said Land Office
"has hereto set his hand and affixed his seal of office,
"the day and date above mentioned.

"ROBERT GARDNER,
"Register of State Land Office.

"Balance of purchase money due, $7,004. [SEAL]
"Interest computed from June 18th, 1872."
Canceled. Patent issued Jan. 18, 1876.
Duly certified by J. W. Shanklin, Register of State
263 Land Office, May 7, 1881.

The COURT—They are all of the same class and character, except they describe different parcels of land?

Mr. HOUGHTON—They are all the same. We now offer in evidence the following certificates of purchase Number 3774, marked

"PLAINTIFFS' EXHIBIT 44,"

which is in the words and figures following:

264 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3774.

"SACRAMENTO, 30th day of September, 1872.

"It appearing from the report of the County Treas-
"urer that on the 6th day of September, A. D. 1872,
"Richard H. Stretch paid to the State of California the
"sum of four hundred and ninety $\frac{56}{100}$ dollars, being twen-
"ty per cent. of the purchase money and first year's in-
"terest on the balance for 2,020 acres of swamp and
"overflowed land, described as follows in Survey No.
265 "235, Kern County: Portions of Sections 1, 2, 12, 13, 24
"and 25 in Township No. 26, South Range, No. 21 East,
"Mt. Diablo meridian. Now, therefore, be it known,
"that the said Richard H. Stretch, having made pay-
"ment of said twenty per cent. and first year's interest
"for the above described tract of land, is the purchaser
"of the same; and, after having in all other respects
"complied with the requirements of the laws providing
"for the sale of said lands and on surrendering this cer-
"tificate to the State of California, and after the said
"lands have been confirmed to the State, the said Rich-
266 "ard H. Stretch, or his assigns, shall be entitled to re-
"ceive a patent for the same.

"In witness whereof, the Register of said Land Office
"has hereto set his hand and affixed his seal of office
"the day and date above mentioned.

"ROBERT GARDNER,
"Register State Land Office.

"Balance purchase money due, $1,616.
"Interest computed June 18th, 1872." [SEAL]

Canceled. Patent issued Jan. 18, 1876.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

267 Mr. GARBER—Are you going to let him take copies of these.

Mr. MCALLISTER—I have no objection.

Mr. GARBER—Simply hand them to him and let him hand them back to you.

Mr. MCALLISTER—Mark them. We can have copies also. We can have them in the notes.

Mr. GARBER—I would like to have them in the notes, to have a complete report.

Number 3776, marked

268 "PLAINTIFFS' EXHIBIT 45,

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3776:

"SACRAMENTO, 30th day of September, 1872.

"It appearing from the report of the County Treas-
"urer, that on the 6th day of August, A. D. 1872, Rich-
"ard H. Stretch paid to the State of California, the
269 "sum of one thousand and twenty-nine ($1,029\frac{82}{100}$) dol-
"lars, being twenty per cent, of the purchase money
"and first year's interest on the balance for 4,240 acres
"of swamp and overflowed land described as follows,
"in Survey No. 234, Kern County. All of Sections 24,
"31, 32, 33 and 34, and portions of Sections 25 and 26,
"in Township No. 25, South Range, No. 22 East Mt.
"Diablo meridian.

"Now, therefore, be it known, that the said Richard
"H. Stretch, having made payment of said twenty per
"cent. and first year's interest, for the above described
"tract of land, is the purchaser of the same; and after
270 "having in all other respects complied with the re-
"quirements of the laws providing for the sale of said
"lands, and on surrendering this certificate to the State
"of California, and after the said lands have been con-
"firmed to the State, the said Richard H. Stretch, or
"his assigns, shall be entitled to receive a patent for
"the same.

"In witness whereof, the Register of said Land Office
"has hereto set his hand and affixed his seal of office,
"the day and date above mentioned.

"ROBERT GARDNER,
"Register of State Land Office.

271 "Balance of purchase money due, $3,392.
"Interest computed from June 18, 1872. [SEAL]
"Canceled. Patent issued Jan. 18, 1876."

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3777, marked

"PLAINTIFFS' EXHIBIT 46,"

which is in the words and figures following:

272 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3777.

"SACRAMENTO, 30th day of September, 1872.

"It appearing from the report of the County Treas-
"urer, that on the 6th day of August, A. D. 1872, Rich-
"ard H. Stretch paid to the State of California the
"sum of thirty-four hundred and forty-nine$\frac{02}{100}$ dollars,
"being twenty per cent. of the purchase money and
"first year's interest on the balance for 14,200 acres
273 "of swamp and overflowed land, described as follows,
"in Survey No. 236, Kern County: all of Sections 4,
"5, 6, 7, 8, 15, 16, 17, 18, 19, 20, 21, 22, 29, 30 and 32,
"also portions of Sections 3, 9, 10, 11, 13, 14, 23, 24,
"27, 28, 31 and 33, in Township No. 26, South Range
"No. 22 east of Mt. Diablo meridian.

"Now, therefore, be it known, that the said Richard
"H. Stretch, having made payment of said twenty per
"cent. and first year's interest, for the above described
"tract of land, is the purchaser of the same; and after
"having in all other respects complied with the re-
"quirements of the laws providing for the sale of said
274 "lands, and on surrendering this certificate to the State
"of California, and after the said lands have been con-
"firmed to the State; the said Richard H. Stretch, or
"his assigns, shall be entitled to receive a patent for
"the same.

"In witness whereof, the Register of said Land Office
"has hereto set his hand, affixed his seal of office, the
"day and date above mentioned.

"ROBERT GARDNER,
"Register of State Land Office.

"Balance of purchase money due, $11,360.
"Interest computed from June 18, 1872. [SEAL]
275 "Canceled. Patent issued Jan. 18, 1876.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3081, marked

"PLAINTIFFS' EXHIBIT 47,"

which is in the words and figures following:

276 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3081.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 16th December, A. D., "1869, that Julius Chester has paid to the State of Cali- "fornia the sum of twenty-five $\frac{21}{100}$ dollars, being twenty "per cent. of the purchase money and first year's interest "on the balance for 120 acres of swamp and overflowed "land, described as follows in Survey No. 70, Kern
277 "County: The east $\frac{1}{2}$ of the N. E. quarter, and N. E. "$\frac{1}{4}$ of S. E. quarter of Section 8, in Township No. 28, "South Range, No. 22 East, Mount Diablo Meridian. "Now, therefore, be it known: That the said Julius "Chester having made payment of said twenty per "cent., and first year's interest, for the above described "tract of land is the purchaser of the same; and after "having in all other respects complied with the require- "ments of the laws providing for the sale of said lands, "and on surrendering this certificate to the State of "California, and after the said lands have been con-
278 "firmed to the State, the said Julius Chester, or his "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office the "day and date above mentioned.

"JOHN W. BOST,
"Register of State of Land Office.

"Balance of purchase money due, $96.00.
"Interest computed from October 27th, 1869." [SEAL]

"For value received I hereby assign the within cer- "tificate, and the lands described therein, to Henry
279 "Miller and Charles Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton.

Cancelled. Patent issued June 15, 1877.
Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3083, marked

"PLAINTIFFS' EXHIBIT 48,"

280 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3083.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 16th December, A. "D. 1869, that Julius Chester has paid to the State "of California the sum of one hundred and thirty-four "$\frac{47}{100}$ dollars, being twenty per cent. of the purchase
281 "money and first year's interest on the balance for 640 "acres of swamp and overflowed land, described as fol- "lows in Survey No. 68, Kern County: All of Section "(16) in Township No. 28, South Range, No. 22 East, "Mount Diablo meridian. Now, therefore, be it known "that the said Julius Chester, having made payment of "said twenty per cent. and first year's interest for the "above described tract of land, is the purchaser of the "same; and, after having in all other respects complied "with the requirements of the laws providing for the "sale of said lands and on surrendering this certificate "to the State of California, and after the said lands
282 "have been confirmed to the State, the said Julius Ches- "ter, or his assigns, shall be entitled to receive a patent "for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512.
"Interest computed from October 27th, 1869.

[SEAL]

283 "For value received, I hereby assign the within cer- "tificate and the lands described therein to Henry Mil- "ler and Charles Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3087, marked

"PLAINTIFFS' EXHIBIT 49,"

284 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA
"No. 3087.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date 16th December, A. D. 1869, "that Julius Chester has paid to the State of California "the sum of one hundred and thirty-four $\frac{47}{100}$ dollars, be- "ing twenty per cent. of the purchase money and first
285 "year's interest on the balance for 640 acres of swamp "and overflowed land, described as follows in Survey "No. 64, Kern County: All of Section twenty-two (22) "in Township No. 28, South Range, No. 22 East, Mount "Diablo meridian. Now, therefore, be it known that "the said Julius Chester, having made payment of said "twenty per cent. and first year's interest for the above "described tract of land, is the purchaser of the same; "and, after having in all other respects complied with "the requirements of the laws providing for the sale of "said lands, and on surrendering this certificate to the "State of California and after the said lands have been
286 "confirmed to the State, the said Julius Chester, or his "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512. [SEAL]
"Interest computed from October 27th, 1869.

"SAN FRANCISCO, September 25th, 1874.

287 "For value received, I hereby assign the following "certificate and the land descrided therein to John H. "Redington.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3090, marked

"PLAINTIFFS' EXHIBIT 50,"

288 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3090.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 16th December, A. D., "1869, that Julius Chester has paid to the State of "California, the sum of one hundred and thirty-four "$\frac{47}{100}$ dollars, being twenty per cent. of the purchase
289 "money, and first year's interest on the balance for "640 acres of swamp and overflowed land, described as "follows, in Survey No. 61, Kern County, all of Section "twenty-six (26) in Township No. 28, South Range, No. "22 East, Mount Diablo Meridian. Now, therefore, be "it known, that the said Julius Chester, having made "payment of said twenty per cent., and first year's in- "terest, for the above described tract of land, is the "purchaser of the same; and after having in all other "respects complied with the requirements of the laws "providing for the sale of said lands, and on surrender- "ing this certificate to the State of California, and after
290 "the said lands have been confirmed to the State, the "said Julius Chester or his assigns, shall be entitled to "receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512.
"Interest computed from October 27th, 1869. [SEAL]

"SAN FRANCISCO, September 25th, 1874.

"For value received I hereby assign the within cer-
291 "teficate and the land described therein to John H. "Redington.

"JULIUS CHESTER.

"Witness: R. E. Houghton.

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3084, marked

"PLAINTIFFS' EXHIBIT 51,"

292 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA.
"No. 3084.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from certificate of the County Treasurer
"bearing date the 16th Deecmber, A. D. 1869, that Julius
"Chester has paid to the State of California the sum of
"twenty-five$\frac{21}{100}$ dollars, being twenty per cent. of the
"purchase money and first year's interest on the bal-
293 "ance for 120 acres of swamp and overflowed land,
"described as follows, in Survey No. 67, Kern County:
"The east $\frac{1}{2}$ of NE quarter and the NW $\frac{1}{4}$ of NE $\frac{1}{4}$ of
"Section 28, in Township No. 28, South Range, No. 22
"East, Mount Diablo meridian. Now, therefore, be it
"known, that the said Julius Chester, having made
"payment of said twenty per cent. and first year's
"interest for the above described tract of land is the
"purchaser of the same; and after having in all other
"respects complied with the requirements of the laws
"providing for the sale of said lands, and on surrender-
294 "ing this certificate to the State of California, and after
"the said lands have been confirmed to the State, the
"said Julius Chester, or his assigns, shall be entitled to
"receive a patent for the same.
"In witness whereof, the Register of said Land Office
"has hereto set his hand and affixed his seal of office,
"the day and date above mentioned.

"JOHN W. BOST.
"Register of State Land Office.

"Balance of purchase money due, $96.00.
"Interest computed from October 27th, 1869. [SEAL]

295 "For value received I hereby assign the within cer-
"tificate, and the lands described therein, to Henry Mil-
"ler and Charles Lux. JULIUS CHESTER.
"Witness: R. E. Houghton.

"Canceled. Patent issued June 15th, 1877.
Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3088, marked

"PLAINTIFFS' EXHIBIT 52,"

296 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

'STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3088.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 16th December, A. D. "1869, that Julius Chester has paid to the State of Cal- "ifornia the sum of thirty-three $\frac{61}{100}$ dollars, being twenty "per cent. of the purchase money and first year's inter-
297 "est on the balance for 160 acres of swamp and over- "flowed land, described as follows in Survey No. 63, "Kern County: The E. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, N. W. $\frac{1}{4}$ of N. E. "$\frac{1}{4}$, and N. E. $\frac{1}{4}$ of S. E. $\frac{1}{4}$ of Section 34 in Township "No. 28, South Range, No. 22 East, Mount Diablo me- "ridian. Now, therefore, be it known that the said "Julius Chester, having made payment of said twenty "per cent. and first year's interest for the above de- "scribed tract of land, is the purchaser of the same; "and, after having in all other respects complied with "the requirements of the laws providing for the sale of "said lands, and on surrendering this certificate to the
298 "State of California and after the said lands have been "confirmed to the State, the said Julius Chester, or his "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $128. [SEAL]
"Interest computed from October 27th, 1869.
299 "For value received, I hereby assign the within cer- "tificate and the lands described therein to Henry Mil- "ler and Charles Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patented June 15, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3069, marked

"PLAINTIFFS' EXHIBIT 53,'

300 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3069.

SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D., "1869, that Julius Chester has paid to the State of "California the sum of twenty-four $\frac{95}{100}$ dollars, being "twenty per cent. of the purchase money and first
301 "year's interest on the balance for 120 acres of swamp "and overflowed land, described as follows, in survey "No. 75, Kern County. The East $\frac{1}{2}$ of N. E. quarter, "and the N. W. $\frac{1}{4}$ of N. E. quarter of Section 2, in "Township No. 29, South Range, No. 22 East, Mount "Diablo Meridian. Now, therefore, be it known, that "the said Julius Chester, having made payment of said "twenty per cent. and first year's interest for the above "described tract of land is the purchaser of the same; "and after having in all other respects complied with "the requirements of the laws providing for the sale of "said lands, and on surrendering this certificate to the
302 "State of California and after the said lands have been "confirmed to the State, the said Julius Chester, or his "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office the "day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $96.
"Interest computed from November 10th, 1869. [SEAL]

303

"For value received I hereby assign the within cer- "tificate and the lands described therein to Henry "Miller and Chas. Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton.

Cancelled. Patent issued June 15, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

No. 3068, marked

304 "PLAINTIFFS' EXHIBIT 54,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3068.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of "California the sum of forty-one $\frac{58}{100}$ dollars, being twenty
305 "per cent. of the purchase money and first year's in- "terest on the balance fo. 200 acres of swamp and over- "flowed land, described as follows, in Survey No. 76, "Kern County: The NE quarter and NE $\frac{1}{4}$ of SE $\frac{1}{4}$ of "Section 12, in Township No. 29, South Range, No. 22 "East, Mount Diablo meridian.

"Now, therefore, be it known, that the said Julius "Chester, having made payment of said twenty per "cent, and first year's interest, for the above described "tract of land, is the purchaser of the same; and after "having in all other respects complied with the require- "ments of the laws providing for the sale of said lands,
306 "and on surrendering this certificate to the State of "California, and after the said lands have been con- "firmed to the State, the said Julius Chester, or his as- "signs, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, the "day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $160.00.
307 "Interest computed from November 10th, 1869. [SEAL]

"For value received I hereby assign the within cer- "tificate and the lands described therein to Henry "Miller and Chas. Lux. JULIUS CHESTER.
"Witness: R. E. Houghton.

"Canceled. Patent issued June 15th, 1877."

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3054, marked

308 "PLAINTIFFS' EXHIBIT 55,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3054.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of Cal-
309 "ifornia the sum of one hundred and thirty-three $\frac{07}{100}$ dol- "lars, being twenty per cent. of the purchase money "and first year's interest on the balance for 640 acres of "swamp and overflowed land, described as follows in "Survey No. 90, Kern County: All of Section Six (6) "in Township No. 29, South Range, No. 23 East, Mount "Diablo meridian. Now, therefore, be it known that "the said Julius Chester, having made payment of said "twenty per cent. and first year's interest for the above "described tract of land, is the purchaser of the same; "and, after having in all other respects complied with "the requirements of the laws providing for the sale of
310 "said lands and on surrendering this certificate to the "State of California, and after the said lands have been "confirmed to the State, the said Julius Chester, or his "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land "Office has hereto set his hand and affixed his seal of "office the day and date above mentioned.

"JOHN W. BOST,

"Register of State Land Office.

"Balance of purchase money due, $512. [SEAL]
"Interest computed from November 10th, 1869.
311

"SAN FRANCISCO, Sept. 25, 1874.

"For value received, I hereby assign the within cer- "tificate and the land described therein to John H. "Redington.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

No. 3057, marked

312 "PLAINTIFFS' EXHIBIT 56,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3057.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of Cali-
313 "fornia, the sum of one hundred and thirty-three $\frac{07}{100}$ dol- "lars, being twenty per cent. of the purchase money "and first year's interest on the balance for 640 acres "of swamp and overflowed land, described as follows, "in Survey No. 87, Kern County: All of Section eight "(8), in Township No. 29, South Range, No. 23 East, "Mount Diablo meridian. Now, therefore, be it known, "that the said Julius Chester, having made payment of "said twenty per cent. and first year's interest, for the "above described tract of land, is the purchaser of the "same; and after having in all other respects complied "with the requirements of the laws providing for the
314 "sale of said lands, and on surrendering this certificate "to the State of California, and after the said lands "have been confirmed to the State, the said Julius "Chester, or his assigns, shall be entitled to receive a "patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512.00.
315 "Interest computed from November 10th, 1869. [SEAL]

"SAN FRANCISCO, September 25th, 1874.

"For value received, I hereby assign the within cer- "tificate, and the land described therein, to John H. "Redington. JULIUS CHESTER.

"Witness: R. E. Houghton.

"Canceled. Patent issued June 15th, 1877."

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3056, marked

316 "PLAINTIFFS' EXHIBIT 57,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3056.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of Cal-
317 "ifornia the sum of twenty-four $\frac{95}{100}$ dollars, being twenty "per cent. of the purchase money and first year's inter- "est on the balance for 120 acres of swamp and over- "flowed land described as follows in Survey No. 88, "Kern County: The East $\frac{1}{2}$ of N. E. $\frac{1}{4}$ and N. W. $\frac{1}{4}$ of "N. E. quarter of Section 18, in Township No. 29, "South Range, No. 23 East, Mount Diablo meridian. "Now, therefore, be it known that the said Julius Ches- "ter having made payment of said twenty per cent. "and first year's interest for the above described tract "of land, is the purchaser of the same; and, after having "in all other respects complied with the requirements
318 "of the laws providing for the sale of said lands and on "surrendering this certificate to the State of California, "and after the said lands have been confirmed to the "State, the said Julius Chester, or his assigns, shall be "entitled to receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $96. [SEAL]
"Interest computed from November 10th, 1869.
319

"For value received, I hereby assign the within cer- "tificate and the lands described therein to Henry Mil- "ler and Chas. Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3059, marked

320 "PLAINTIFFS' EXHIBIT 58,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3059.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of Cali- "fornia the sum of twenty-four $\frac{95}{100}$ dollars, being twenty
321 "per cent. of the purchase money and first year's in- "terest on the balance for 120 acres of swamp and "overflowed land, described as follows, in Survey No. "85, Kern county: The East $\frac{1}{2}$ of NE quarter and NW "$\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 20, in Township No. 29, South "Range, No. 23 East, Mount Diablo meridian. Now, "therefore, be it known, that the said Julius Chester, "having made payment of said twenty per cent. and "first year's interest, for the above described tract of "land, is the purchaser of the same; and after having "in all other respects complied with the requirements "of the laws providing for the sale of said lands and
322 "on surrendering this certificate to the State of Califor- "nia, and after the said lands have been confirmed to "the State, the said Julius Chester, or his assigns, "shall be entitled to receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $96.00.
"Interest computed from November 10th, 1869. [SEAL]

323 "For value received, I hereby assign the within cer- "tificate, and the lands described therein, to Henry "Miller and Chas. Lux. JULIUS CHESTER.
"Witness: R. E. Houghton.

"Canceled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3066, marked

"PLAINTIFFS' EXHIBIT 59,"

324 which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"No. 3066.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D., "1869, Julius Chester paid to the State of California, "the sum of one hundred and thirty-three $\frac{07}{100}$ dollars, "being twenty per cent. of the purchase money, and "first year's interest on the balance for 640 acres of
325 "swamp and overflowed land, described as follows, in "survey No. 78, Kern County. All of Section Twenty- "six (26) in Township No. 29, South Range, No. 23 "East, Mount Diablo Meridian. Now, therefore, be it "known: That the said Julius Chester having made "payment of said twenty per cent. and first year's in- "terest, for the above described tract of land, is the "purchaser of the same; and after having in all other "respects complied with the requirements of the laws "providing for the sale of said lands, and on surrender- "ing this certificate to the State of California, and after "the said lands have been confirmed to the State, the
326 "said Julius Chester, or his assigns, shall be entitled to "receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512.
"Interest computed from November 10th, 1869. [SEAL]

"For value received I hereby assign the within cer- "tificate, and the lands described therein, to Henry
327 "Miller and Chas. Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3,062, marked

"PLAINTIFFS' EXHIBIT 60,"

which is in the words and figures following:

328 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3062.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D., "1869, that Julius Chester has paid to the State of "California the sum of forty-one $\frac{58}{100}$ dollars, being twenty "per cent. of the purchase money and first year's in- "terest on the balance for 200 acres of swamp and over- "flowed land, described as follows, in Survey No. 82,
329 "Kern County: The NE quarter and NE $\frac{1}{4}$ of NW "quarter of Section 28, in Township No. 29, South "Range, No. 23 East, Mount Diablo Meridian. Now, "therefore, be it known, that the said Julius Chester, "having made payment of said twenty per cent. and "first year's interest for the above described tract of "land, is the purchaser of the same; and after having "in all other respects complied with the requirements "of the laws providing for the sale of said lands, and on "surrendering this certificate to the State of California, "and after said lands have been confirmed to the State, "the said Julius Chester, or his assigns, shall be en-
330 "titled to receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $160.
"Interest computed from November 10th, 1869. [SEAL]
"For value received I hereby assign the within cer- "tificate, and the land described therein, to Henry "Miller and Chas. Lux.
331 "JULIUS CHESTER.
"Witness: R. E. Houghton.

Cancelled. Patent issued June 15th, 1877.
Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3065, marked

"PLAINTIFFS' EXHIBIT 61,"

which is in the words and figures following:

"CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3065.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, that Julius Chester has paid to the State of Cal- "ifornia the sum of eight $\frac{31}{100}$ dollars, being twenty per "cent. of the purchase money and first year's interest "on the balance for 40 acres of swamp and overflowed "land, described as follows in Survey No. 79, Kern "County: The N. E. $\frac{1}{4}$ of Northeast quarter of Section "34 in Township No. 29, South Range, No. 23 East, "Mount Diablo meridian. Now, therefore, be it known "that the said Julius Chester, having made payment of "said twenty per cent. and first year's interest for the "above described tract of land, is the purchaser of the "same; and, after having in all other respects complied "with the requirements of the laws providing for the "sale of said lands, and on surrendering this certificate "to the State of California, and after the said lands "have been confirmed to the State, the said Julius "Chester, or his assigns, shall be entitled to receive a "patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
"Register State Land Office.

"Balance of purchase money due, $32. [SEAL]
"Interest computed from November 10th, 1869.
"For value received, I hereby assign the within cer- "tificate and the lands described therein to Henry Mil- "ler and Chas. Lux.

"JULIUS CHESTER.

"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.
Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3,067, marked

"PLAINTIFFS' EXHIBIT 62,"

which is in the words and figures following:

336 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3,067.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D., "1869, that Julius Chester has paid to the State of Cali "fornia, the sum of one hundred and thirty-three $\frac{07}{100}$ "dollars, being twenty per cent. of the purchase money "and first year's interest on the balance for 640 acres "of swamp and overflowed land, described as follows, in
337 "Survey No. 77, Kern County. All of Section Thirty- "six (36), in Township No. 29, South Range, No. 23 "East, Mount Diablo Meridian. Now, therefore, be it "known, that the said Julius Chester, having made "payment of said twenty per cent. and first year's in- "terest for the above described tract of land, is the "purchaser of the same; and after having in all other "respects complied with the requirements of the laws "providing for the sale of said lands, and on surrender- "ing this certificate to the State of California, and after "the said lands have been confirmed to the State, the "said Julius Chester, or his assigns, shall be entitled to
338 "receive a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
Register of State Land Office.

"Balance of purchase money due, $512.
"Interest computed from November 10th, 1869. [SEAL]

"For value received I hereby assign the within cer- "tificate, and the lands therein described, to Henry "Miller and Chas. Lux.

339 "JULIUS CHESTER.

"Witness: R. E. Houghton.

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3045, marked

"PLAINTIFFS' EXHIBIT 63,"

which is in the words and figures following:

340 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3045.

"SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 30th December, A. D. "1869, Julius Chester paid to the State of California the "sum of one hundred and thirty-three $\frac{07}{100}$ dollars, being "twenty per cent. of the purchase money and first year's "interest on the balance for 640 acres of swamp and "overflowed land, described as follows in Survey No.
341 "99, Kern County: All of Section Ten (10) in Town- "ship No. 30, South Range, No. 24 East, Mount Diablo "meridian. Now, therefore, be it known that the said "Julius Chester, having made payment of said twenty "per cent. and first year's interest for the above de- "scribed tract of land, is the purchaser of the same; "and, after having in all other respects complied with "the requirements of the laws providing for the sale of "said lands, and on surrendering this certificate to the "State of California, and after the said lands have been "confirmed to the State, the said Julius Chester, or his
342 "assigns, shall be entitled to receive a patent for the "same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512. [SEAL]
"Interest computed from November 10th, 1869.

"SAN FRANCISCO, September 25th, 1874.

"For value received, I hereby assign the within cer-
343 "tificate and the land described therein to John H. Red- "ington. JULIUS CHESTER.
"Witness: R. E. Houghton."

Cancelled patent issued June 15th, 1877.
Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3,082, marked

"PLAINTIFFS' EXHIBIT 64,"

which is in the words and figures following:

344 "CERTIFICATE OF PURCHASE."

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3082.

SACRAMENTO, 28th day of January, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 16th December, A. D., "1869, that Julius Chester has paid to the State of "California, the sum of one hundred and thirty-four "$\frac{47}{100}$ dollars, being twenty per cent. of the purchase "money and first year's interest on the balance for 640 "acres of swamp and overflowed land, described as fol-
345 "lows in Survey No. 69, Kern County. All of Section "Four (4) in Township No. 28, South Range, No. 22 "East, Mount Diablo Meridian. Now, therefore, be it "known that the said Julius Chester, having made pay-"ment of said twenty per cent. and first year's interest, "for the above described tract of land, is the purchaser "of the same; and after having in all other respects "complied with the requirements of the laws providing "for the sale of said lands, and on surrendering this "certificate to the State of California, and after the said "lands have been confirmed to the State, the said Julius
346 "Chester, or his assigns, shall be entitled to receive a "patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $512.
"Interest computed from October 27th, 1869. [SEAL]

"For value received I hereby assign the within cer-"tificate, and the land described therein, to Henry
347 "Miller and Chas. Lux.

"JULIUS CHESTER,
"Witness: R. E. Houghton."

Cancelled. Patent issued June 15th, 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

Number 3259, marked

"PLAINTIFFS' EXHIBIT 65,"

which is in the words and figures following:

348 "CERTIFICATE OF PURCHASE.

"STATE LAND OFFICE OF THE STATE OF CALIFORNIA,
"No. 3259.

"SACRAMENTO, 6th day of June, 1870.

"It appearing from the certificate of the County "Treasurer, bearing date the 10th May, A. D. 1870, "that Julius Chester has paid to the State of California "the sum of fifty-nine $\frac{57}{100}$ dollars, being twenty per cent. "of the purchase money and first year's interest on the "balance for 240 acres of swamp and overflowed land, "described as follows in Survey No. 102, Kern County:
349 "The N. E. $\frac{1}{4}$, N. E. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ and N. E. $\frac{1}{4}$ of S. E. $\frac{1}{4}$ of "Section Eight (8) in Township No. 30, South Range, No. "24 East, Mount Diablo meridian. Now, therefore, be it "known that the said Julius Chester, having made pay- "ment of said twenty per cent. and first year's interest "for the above described tract of land, is the purchaser "of the same; and, after having in all other respects "complied with the requirements of the laws providing "for the sale of said lands, and on surrendering this "certificate to the State of California, and after the said "lands have been confirmed to the State, the said Ju-
350 "lius Chester, or his assigns, shall be entitled to receive "a patent for the same.

"In witness whereof, the Register of said Land Office "has hereto set his hand and affixed his seal of office, "the day and date above mentioned.

"JOHN W. BOST,
"Register of State Land Office.

"Balance of purchase money due, $192. [SEAL]
"Interest computed from 21st February, 1870.

"BAKERSFIELD, June 23, 1870.

"For value received, I hereby assign this to H. P.
351 "Livermore. JULIUS CHESTER."

Received from Miller, Lux & Crocker, three hundred and one $\frac{60}{100}$ dollars, being payment in full of principal and interest for the within described tract of land.

County Treasurer's Office, Kern County, 5th day of September, 1876. J. C. PEMBETON,
County Treasurer.

Cancelled. Patent issued Sept. 11th, 1876.

Duly certified by J. W. Shanklin, Register of State Land Office, May 7, 1881.

352 No. 3260, marked "Plaintiff's Exhibit 66,"

Which is in the words and figures following:

"Certificate of Purchase.

State Land Office of the State of California, }
" No. 3260. Sacramento, Sixth day of June, 1870. }

" It appearing from the certificate of the County
" Treasurer, bearing date the 10th May, A. D. 1870, Julius
" Chester has paid to the State of California, the sum of
" one hundred and twenty-nine 11-100 dollars, being
" twenty per cent. of the purchase money and first year's
353 " interest on the balance for 520 acres of swamp and
" overflowed land described as follows, in Survey No. 103,
" Kern County: The N. ½, E. ½ of S. E. ¼, N. W. ¼ of S.
" E. ¼ and N. ½ of S. W. ¼ of Section Six (6), in Township
" No. 30 South, Range No. 24 East, Mount Diablo Meri-
" dian. Now therefore, be it known, that the said Julius
" Chester having made payment of said twenty per cent.,
" and first year's interest, for the above described tract of
" land, is the purchaser of the same and after having in
" all other respects complied with the requirements of the
" laws providing for the sale of said lands, and on surren-
" dering this certificate to the State of California; and after
354 " the said lands have been confirmed to the State the
" said Julius Chester or his assigns shall be entitled to re-
" ceive a Patent for the same.

" In witness whereof, the register of said Land Office
" has hereto set his hand and affixed his seal of Office, the
" day and date above mentioned.

" [seal.] John W. Bost,
" Register of State Land Office.

" Balance of purchase money due, $416.
" Interest computed from 21st of February, 1870.

" Bakersfield, June 23rd, 1870.

355 " For value received I hereby assign this to H. P.
" Livermore.

" Julius Chester.

" Received from Miller, Lux & Crocker, six hundred
" and fifty-two 31-100 dollars, being payment in full of
" principal and interest for the within described tract of
" land.

" Connty Treasurer's office, Kern County, 5th day of
" September, 1876.

Jas. C. Pemberton,
County Treasurer.

356 " Cancelled, Patent issued Sept. 11th, 1876. Duly cer-
" tified by J. W. Shankin, Register of State Land Office,
" May 7th, 1881.

" No. 4321, Survey 177, and the assignment to Henry
" Miller and Charles Lux, Marked " Plaintiff's
" Exhibit 67 ".

" In the words and figures following:

" Survey No. 177, Kern County.

" Certificate of Purchase.

357 " State Land Office of the State of California,
" Swamp and Overflowed Land. Price Per Acre $1.
" Sacramento, 5th day of February, 1877.

" It appearing from the report of the County Treasurer,
" that on December 10th, A. D. 1871, Richard H. Stretch
" paid to the State of California the sum of thirty-three
" 90-100 dollars, being twenty per cent. of the purchase
" money, and interest on the balance up to January 1st,
" 1872, for 160 acres of swamp and overflowed land de-
" scribed as follows: The N. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, S. E. $\frac{1}{4}$ of N.
" E. $\frac{1}{4}$ and N. E. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ of Section 1, in Township
" No. 30 South, Range No. 23 East, Mount Diablo Merid-
358 " ian. Now, therefore, be it known, that the said Richard
" H. Stretch having made payment of said twenty per
" cent. and first year's interest for the above described
" tract of land is the purchaser of the same, and after
" having in all other respects complied with the require-
" ments of the laws providing for the sale of said lands
" and the same have been confirmed to the State, and on
" surrendering this certificate to the State of California
" the said Richard H. Stretch, or his assigns shall be en-
" titled to receive a Patent for the same.

" In witness whereof, the register of said Land Office
359 " has hereto set his hand and affixed his seal of Office, the
" day and date above mentioned.

" [seal.] Wm. Minis,
" Register of State Land Office.

" Balance of purchase money due $128.

" Interest computed from Nov. 7th, 1871."

" For and in consideration of one dollar, to me in hand
" paid, I do hereby grant, bargain, sell, transfer, assign and
" set over unto Henry Miller and Charles Lux, the annexed
" certificate of purchase, No. 4321 (Survey No. 177), and

360 " the land therein described, to-wit: The N. ½ of N. E. ¼,
" S. E. ¼ of N. E. ¼, and N. E. ¼ of N. W. ¼ of Section (1)
" one in Township (30) thirty South Range, (23) twenty-
" three East Mount Diablo Meridian, containing 160 acres,
" and I do hereby authorize the said Henry Miller and
" Charles Lux, or their assigns, to make the necessary pay-
" ments for and to receive a patent for the same from the
" proper authorities, or to demand and recover back from
" the said authorities any and all moneys already paid, or
" that may hereafter be paid on account of said land.

" RICHARD H. STRETCH. [SEAL.]

Dated in Havilah, March 3, 1877."

361

" STATE OF CALIFORNIA, }
" County of Kern. }

" On the third day of March, A. D. eighteen hundred
" and seventy-seven, before me, Elias Cohn, a notary pub-
" lic, in and for the County of Kern, personally appeared,
" Richard H. Stretch, known to me to be the same person
" whose name is subscribed to the annexed instrument, and
" acknowledged to me that he has executed the same.

" In witness whereof, I have hereunto set my hand
362 " and affixed my official seal at my office, in the County of
" Kern, the day and year in this certificate first above
" written.

[NOTARIAL SEAL.] E. COHN,
Notary Public.

" Cancelled, Patent issued June 15th, 1877."
" Duly certified by J. W. Shanklin, Register of State
" Land Office, May 7th, 1881.

" NO. 4017, SURVEY NO. 294, AND THE ASSIGNMENT TO
" HENRY MILLER AND CHARLES LUX, MARKED " PLAIN-
363 " TIFF'S EXHIBIT 68,"

" In the words and figures following:

" CERTIFICATE OF PURCHASE.

" State Land Office of the State of California, }
" Swamp and Overflowed Land. Price, Per Acre, $1. }
" SACRAMENTO, 2d day of March, 1874. }

" It appearing from the report of the County Treas-
" urer, that on February 14th, A. D. 1874, Duncan Beau-
" mont paid to the State of California, the sum of thir-

364 " teen eight one-hundredth dollars, being twenty per
" cent. of the purchase money, and interest on the bal-
" ance up to January 1st, 1875, for 47.63 acres of swamp
" and overflowed land, described as follows: Fractional
" portions of Sections 8 and 9, in Township No. 25 South,
" Range, No. 21 East, Mount Diablo Meridian. Now,
" therefore, be it known, that the said Duncan Beau-
" mont, having made payment of said twenty per cent.,
" and first year's interest for the above described tract of
" land, is the purchaser of the same, and after having, in
" all respects, complied with the requirements of the laws,
" providing for the sale of said lands, and the same have
365 " been confirmed to the State, and on surrendering this
" certificate to the State of California, the said Duncan
" Beaumont or his assigns shall be entitled to receive a
" Patent for the same.

" In witness whereof the Register of said Land office
" has hereto set his hand and affixed his Seal of Office
" the day and date above mentioned.

" ROBERT GARDNER
" Register State Land Office.

" Balance of Purchase Money due, $38 10.

" Interest computed from January 26th, 1874."

366 [SEAL.]

" For value received, I, the undersigned, hereby trans-
" fer and assign the annexed Certificate of Purchase, No.
" 4017, for forty-seven and sixty-three hundredths acres
" of swamp and overflowed land unto Henry Miller and
" Charles Lux, and I do hereby authorize the said Henry
" Miller and Charles Lux to receive a patent from the
" proper authorities for the same.

" DUNCAN BEAUMONT.

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367 " STATE LAND OFFICE, }
" State of California. }

" On this second day of March, A. D. one thousand
" eight hundred and seventy-four, personally appeared
" before me, Duncan Beaumont, and to me known to be
" that individual, and acknowledged that he executed the
" above instrument, and that the same was done freely
" and voluntary, for the uses and purposes therein men-
" tioned.

" In witness whereof, I have hereunto set my hand

368 " and affixed my official seal, this second day of March,
" 1874.
" [SEAL.] ED. M. MARTIN.
" Notary Public.
" Cancelled, Patent issued February 17, 1876.
" Duly certified by J. W. Shanklin, Register of State
" Land Office, May 7th, 1881.

NUMBER 4018, SURVEY NUMBER 295, AND THE ASSIGNMENT TO HENRY MILLER AND CHARLES LUX, MARKED " PLAINTIFFS' EXHIBIT 69,"

369 In the words and figures following:

" Survey No. 295. Kern County.

" CERTIFICATE OF PURCHASE.

" State Land Office of the State of California.
" Swamp and Overflowed Land. Price per acre, one
" dollar.
" SACRAMENTO, 2d day of March, 1874.

" It appearing from the report of the County Treasurer,
" that on February 14th, A. D. 1874, Duncan Beaumont
" paid to the State of California the sum of nine 64-100
370 " dollars, being twenty per cent. of the purchase-money
" and interest on the balance, up to January 1st, 1875,
" for 35 12-100 acres of swamp and overflowed land, de-
" scribed as follows: Fractional portions of Sections 26
" and 35, in Township No. 25 South, Range No. 21
" East, Mount Diablo Meridian. Now, therefore, be it
" known that the said Duncan Beaumont, having made
" payment of said twenty per cent. and first year's in-
" terest for the above described tract of land, is the pur-
" chaser of the same, and after having in all other respects
" complied with the requirements of the laws providing
" for the sale of said lands, and the same have been con-
371 " firmed to the State, and on surrendering this certificate
" to the State of California, the said Duncan Beaumont
" or his assigns shall be entitled to receive a patent for
" the same.
" In witness whereof, the Register of said Land Office
" has hereto set his hand and affixed his seal of office the
" day and date above mentioned.
[SEAL.] " ROBERT GARDNER,
" Register of State Land Office.
" Balance of purchase money due, $28 10-100.
" Interest computed from Jan. 26th, 1874.

372 " For value received, I, the undersigned, hereby trans-
" fer and assign the annexed Certificate of Purchase, No.
" 4018, for thirty-five and twelve-hundredths acres of
" swamp and overflowed land, unto Henry Miller and
" Charles Lux, and I do hereby authorize the said Henry
" Miller and Charles Lux to receive a patent from the
" proper authorities for the same.

" DUNCAN BEAUMONT. [SEAL.]

" STATE LAND OFFICE,
" State of California.

373 " On this 2d day of March, A. D. one thousand eight
" hundred and seventy-four, personally appeared before me
" Duncan Beaumont, and to me known to be that individ-
" ual, and acknowledged that he executed the above in-
" strument, and that the same was done freely and volun-
" tary, for the uses and purposes therein mentioned.

" In witness whereof, I have hereunto set my hand
" and affixed my official seal, this second day of March,
" 1874.

[SEAL.] " ED. M. MARTIN
" Notary Public.

" Cancelled. Patent issued Feb. 17, 1876."

374 " Duly certified by J. W. Shanklin, Register of State
" Land Office, May 7th, 1881.

NUMBER 4019, SURVEY NUMBER 296, AND THE ASSIGNMENT TO HENRY MILLER AND CHARLES LUX, MARKED " PLAINTIFFS' EXHIBIT 70,"

In the words and figures following:

" CERTIFICATE OF PURCHASE.

" State Land Office of the State of California.
375 " Swamp and Overflowed Land. Price per acre, one
" dollar.
" SACRAMENTO, 2nd day of March, 1874.

" It appearing from the report of the County Treasurer,
" that on February 14th, A. D. 1874, Duncan Beaumont
" paid to the State of California the sum of eleven 41-100
" dollars, being twenty per cent. of the purchase money
" and interest on the balance up to January 1st, 1875, for
" 41 55-100 acres of swamp and overflowed land, de-
" scribed as follows: Fractional portions of Sections 15,
" 22 and 23, in Township No. 25 South, Range No. 2

376 " East, Mount Diablo Meridian. Now, therefore, be it
" known that the said Duncan Beaumont, having made
" payment of said twenty per cent. and first year's inter-
" est for the above described tract of land, is the pur-
" chaser of the same, and after having in all other respects
" complied with the requirements of the laws providing
" for the sale of said lands, and the same have been con-
" firmed to the State, and on surrendering this certificate
" to the State of California, the said Duncan Beaumont
" or his assigns shall be entitled to receive a patent for
', the same.

" In witness whereof, the Register of said Land Office
377 " has hereto set his hand and affixed his seal of office, the
" day and date above mentioned.

[SEAL.] " ROBERT GARDNER,
" Register of State Land Office.

" Balance of purchase money due, $33.24.
" Interest computed from January 26th, 1874.

" For value received, I, the undersigned, hereby trans-
" fer and assign the annexed certificate of purchase No.
" 4019, for forty-one and fifty-five hundredths acres of
" swamp and overflowed land, unto Henry Miller and
" Chas. Lux, and I do hereby authorize the said Henry
378 " Miller and Chas. Lux to receive a patent from the
" proper authorities for the same.

" DUNCAN BEAUMONT.

" STATE LAND OFFICE, }
" State of California. }

" On this second day of March, A. D. one thousand
" eight hundred and seventy-four, personally appeared
" before me Duncan Beaumont, and to me known to be
" that individual, and acknowledged that he executed the
" above instrument, and that the same was done freely
379 " and voluntary, for the uses and purposes therein men-
" tioned.

" In witness whereof, I have hereunto set my hand
" and affixed my official seal, this second day of March,
" 1874.

[SEAL.] " ED. M. MARTIN,
" Notary Public."

" Cancelled, Patent issued Feb. 17th, 1876.
" Duly certified by J. W. Shanklin, Register of State
" Land Office, May 7, 1881.

380 " No. 3,060, MARKED " PLAINTIFF'S EXHIBIT 71,"

With words and figures following:

" CERTIFICATE OF PURCHASE.

" State Land Office of the State of California, }
" No. 3,060. SACRAMENTO, 28th day of January, 1870. }

" It appearing from the certificate of the County Treas-
" urer, bearing date the 30th December, A. D. 1869, that
" Julius Chester has paid to the State of California the
" sum ot one hundred and thirty-three seven one hun-
381 " dredths dollars, being twenty per cent. of the Purchase
" Money, and first year's interest on the balance for 640
" acres of swamp and overflowed land described as fol-
" lows in Survey No. 84, Kern County: All of Section
" sixteen (16) in Township No. 29, South Range, No. 23,
" East Mount Diablo Meridian. Now, therefore, be it
" known, that the said Julius Chester, having made pay-
" ment of said twenty per cent., and first years's interest,
" for the above described tract of land is the purchaser
" of the same, and after having in all other respects com-
" plied with the requirements of the laws providing for
382 " the sale of said lands, and on surrendering this certifi-
" cate to the State of California, and after the said lands
" have been confirmed to the State, the said Julius Ches-
" ter, or his assigns, shall be entitled to receive a patent
" for the same.

" In witness whereof, the register of said Land Office
" has hereto set his hand and affixed his seal of office the
" day and date above mentioned.

" [SEAL.] JOHN W. BOST,
" Register of State Land Office.

" Balance of purchase money due, $512.

" Interest computed from November 10th, 1869."

383

" SAN FRANCISCO, September 25th, 1874.

" For value received I hereby assign the within certifi-
" cate and the land described therein, to John H. Reding-
" ton.

" JULIUS CHESTER.

" Witness: R. E. Houghton.

" Cancelled, Patent issued June 15th, 1877."

" Duly certified by J. W. Shanklin, Register of State
" Land Office, May 13, 1881.

384 " No. 3,063, MARKED " PLAINTIFF'S EXHIBIT 72,"

In the words and figures following:

" CERTIFICATE OF PURCHASE.

" State Land Office of the State of California, }
" No. 3,063. SACRAMENTO, 28th day of January, 1870 }

" It appearing from the Certificate of the County
" Treasurer, bearing date the 30th December, A. D. 1869,
" that Julius Chester has paid to the State of California,
" the sum of one hundred and thirty-three seven one-
385 " hundredths dollars, being twenty per cent. of the pur-
" chase money and first year's interest on the balance for
" 640 acres of swamp and overflowed lands, described as
" follows in Survey No. 81, Kern County: All of Section
" twenty-two (22) in Township No. 29 South, Range, No.
" 23 East, Mount Diablo Meridian.

" Now, therefore, be it known, that the said Julius
" Chester, having made payment of said twenty per cent.,
" and first year's interest, for the above described tract of
" land, is the purchaser of the same; and after having in
" all other respects complied with the requirements of the
" laws providing for the sale of said lands, and on sur-
386 " rendering this certificate to the State of California, and
" after the said lands have been confirmed to the State,
" the said Julius Chester, or his assigns, shall be entitled
" to receive a patent for the same.

" In witness whereof, the Register of said Land Office
" has hereto set his hand and affixed his seal of office,
" the day and date above mentioned.

" JOHN W. BOST,
" Register of State Land Office.

" Balance of purchase money due, $512.
" Interest computed from November 10th, 1869."

387

SAN FRANCISCO, Sept. 25th, 1874.

" For value received, I hereby assign the within certificate and the land described therein to John H. Redington.

" JULIUS CHESTER.

Witness: R. E. Houghton.

Cancelled patent issued June 15 1877.

Duly certified by J. W. Shanklin, Register of State Land Office, May 13, 1881.

388 The COURT—These offers are all made in connection with the first one, and under the same proposition?

Mr. MCALLISTER—Yes sir, I understand the ruling is the same, and the exception is the same, all the way through.

The COURT—Yes, sir.

C. BROWER,

Being re-called for plaintiff in rebuttal, testified as follows:

By Mr. HOUGHTON. Q—Are you the Secretary of the Pioneer Canal Company?

389 A—Yes, sir.

Q—Have you the records of that company with you?

A—I have a portion of them.

Q—Who are the stock holders of that company?

A—I cannot say without referring to the records.

Q—Can you tell from your records?

A—I think I can, but I am not certain.

Q—Will you refer to the records?

A—Yes, sir. [Refers.] It will take me some time to give the names. I will have to run through the stock ledger and take the balances.

390 Q—How many shares of stock are there in that company?

A—I don't remember.

Mr. GARBER—This is an offer to prove the stockholders of these various companies?

Mr. HOUGHTON—Yes, sir.

Mr. GARBER—We object to that, as immaterial and irrelevant, and we will take a ruling upon it.

Mr. HOUGHTON—Our offer is, as to each of these companies, to show that J. B. Haggin and W. B. Carr control a majority of the stock, and control all these companies; and it is about that that we desire to question this wit-

391 ness. I simply specify this company, the Pioneer, first: We propose to show by this witness that J. B. Haggin and W. B. Carr own the majority or nearly all of the stock of that company, and control the corporation, and did at the time of the commencement of this action, and have ever-since.

The COURT—I cannot see the materiality of it. I will sustain the objection.

[Plaintiffs except.]

Mr. HOUGHTON—Then to save time I offer to show that, as regards the Stein Canal Company, J. B. Haggin and

392 W. B. Carr own nearly all the stock of that company, and control the corporation; also, the same as to the Buena Vista Canal Company; also, the same as to the Kern Island Irrigating Canal Company; also, the same as to the Farmers' Canal Company; also, the same as to the Gates Canal Company; also, the same as to the James Canal Company; also, the same as to the Plunkett Canal Company; also, the same as to the James & Dixon Canal Company; and also, the same as to the Joyce Canal Company. The same offer is made as to each one of them.

The COURT—The same ruling,

[Plaintiffs except.]

393

THURSDAY, June 2d, 1882.

PHILIP A. STINE,

Being called as a witness for Plaintiffs in rebuttal and sworn, testified as follows:

To Mr. HOUGHTON—

At present I am residing on the old Chester Ranch. have been in Kern County since 1864. I have lived here with Colonel Baker at his house for about fourteen
394 months, and then I left here, I have resided on Old River, I first moved on to Old River in 1867, and I resided at my old ranch, Section 10, Township 30, Range 27, on that river from then until about three or four months ago, right on Old Kiver. What has been referred to as the Stine Crossing is near my place, right on my ranch, and the Stine Ditch is also named after me.

By Mr. HOUGHTON. Q—Do you know a ditch known as the Stine Ditch that runs right across between here and the bridge running across Old River?

A—The Stine Canal, yes, sir. I don't remember when it was built.

395 Q—Do you know what was known as the Stine Ditch before the construction of that canal?

A—Yes, sir.

Q—How large was that ditch, the construction that existed prior to the construction of that canal?

A—You might say it was as big as Old River.

Q—How large was the ditch that you say was known as the Stine ditch?

A—Where I took it out of the river, what is known as Old River, I think it is about—where it struck upon the banks, and where I made the dam across—where it struck

396 it was about ten feet wide. Then, when it came out of the banks it was ten or twelve feet wide, and it continued that depth all the way through and to Mr. Reynolds' ranch, on Section 10. That ditch was about a mile and a quarter or a mile and a half above Section 10—a mile and a quarter, I guess. That was constructed in 1868.

Q—Does the present canal of the Stine Company follow along the same course of that ditch or near it?

A—Yes, sir; near the same course; east of it, on the higher ground. It runs in the same direction.

Q—That ditch that you spoke of was what is known as the Stine ditch, was it?

397 A—That was the small ditch—the ditch leading from my ranch there. I built the ditch in 1868, and then I had to cut through the sand bar at the head of the river, and to turn it into that ditch to fill the river up. The sand bar that I had to cut was right at the head of the river. That was done on the 16th of April, 1868. The head of the river was filled up at that time.

Q—What proportional part of the water ran in Old River and in New River during the years from the time that you went there in 1868, down to 1876? After it was closed up in 1868, and opened, in a measure, what

398 proportional part of the water in Kern River ran in Old River?

A—Taking the years when I knew it, being from January to January, I don't think there was over one-fourth of the water ran in Old River, and the balance ran down New River.

Q—You live on Old River, do you?

A—Yes, sir.

Cross-Examination of

PHILIP A. STINE.

399 By Mr. HAGGIN. Q—Do you know whether the Stine Canal Company did or did not take possession of Old River?

A—Yes, sir; they did.

Q—Do you know about what year that was?

A—I think it was in 1875; I am not sure. The papers of the incorporation will show when it was taken possession of and when they claimed the water. I know the old head-gate that was thrown across that river a little way below its head. I think that was put there in 1875–1876, in the winter. It was directly after the

400 notice was posted up, the same winter, or fall, of 1875. It might have been 1874. I am not sure. I could not tell without I referred to the papers. I helped work on it, and paid my assessment on it. I never saw the papers—the notice—from the time I put it up until now. It might have been in 1872; I don't recollect. Come to recollect now, it might have been in 1872, for I left the valley and went to the mountains in 1871, and I think it was the year following.

Q—Then you think it was about 1872?

A—1872 or 1873. I have never seen the notices from
401 the time I posted the notices, except while it was standing on the bank of the river.

Q—You spoke about the water that ran down Old River—the proportion. You said that at certain periods and at certain times—at an ordinary stage of water in the main river, what part do you think would run down Old River? Was one-half of it running down Old River?

A—In the ordinary stage of the water?

Q—Yes, sir. Whether one-half of it would'nt run down Old River?

A—No, sir; I don't think it would.

Q—Didn't you state so to Mr. Carr in Mr. Garber's
402 presence?

A—I don't think I did.

Q—You didn't state that, in the ordinary stage, one-half would run down Old River.

A—I don't know what you call an ordinery stage of the water. It is what I call ordinary when the river is half full; an extraordinary stage of water is when the river is running over. When the water of the river is up to its banks it might do it. I must have misunderstood the question. At an ordinary stage of the water it certainly could not do it. I have never seen it.

Q—Didn't you state to Mr. Carr, in the presence of
403 Mr. Flournoy, that in an ordinary stage of the water about one-half would go down Old River, except when the water was very high, in its natural condition?

A—I must have misunderstood the question entirely. At ordinary stages of water? I didn't understand the question. I call an ordinary stage of water when the river is about half full. An extraordinary stage of water is when the river is running over. Then, I suppose, overflowing the country, it might divide up, and half of it would go that way. I have never seen half of the water of Kern River going that way, except such times as

404 that, when it was more than full. Then about half of it would run that way. When the water was over its banks, and full to the banks, and overflowing, half of it might go down that way. There is no question of that in my mind at all, but it is entirely—unless water would run up hill.

Q (interrupting)—Why unless water run up hill? Do you mean that there is more fall to New than to Old River?

A—Yes; I think so. It is upon that that I base my opinion, and the width of the two rivers. One is wider than the other. And another thing that I judge from is,
405 from 1862 to 1868 Old River carried nearly all the water. Goose Lake slough would be full in the spring of the year, until it began to go down, then the slough would fill up and all the water would come down Old River, after it got through below the bridge at the mouth of Goose Lake ditch, as they call it—Goose Lake slough. Since that time it has been nearly the opposite. Some years, since that time, Old River has been below Section 15 in Township 30, Range 27. It has been a dry sand bed.

406 J. D. SCHUYLER,

Being re-called for plaintiffs in rebuttal, testified as follows:

By Mr. HOUGHTON. Q—Was Mr. L. L. Dixon in the employment of the State Engineers' Department during the years 1879 and 1880?

A—A portion of the years; yes, sir; a portion of both of those years.

Q—What were his duties in connection with his employment in that office during 1879?

407 A—I had him at first with me as assistant on gauging work. Afterwards he was instructed to make a record of all the gauge rods that had been placed in the various canals in this county. Then, in the fall of the year, he was instructed to gather statistics of the area of the land that had been irrigated, the crops, and so forth. His instructions were to ascertain the land irrigated by the different irrigators, the character of the crops irrigated, and the number of times of irrigation.

Q—Was this a part of his duties in connection with the position he held?

408 A—They were made so; yes, sir.

Q—Were those services rendered in connection with that office, or for you individually, for your own purposes?

A—They were not rendered for me. They were rendered to the State.

Q—Did he make a report of irrigation in connection with the statistics?

A—He turned over to me all of his notes; yes, sir.

Q—Is this the book which he returned to you? [Showing a book to the witness.]

A—For 1880; yes, sir.

409 Q—Does that contain the statistics which he sent you?

A—Yes, sir.

Q—You say that was done by him as an officer of the State, employed by you as Deputy State Engineer?

A—Yes, sir, and as a part of his duties in connection with that employment.

Q—Did Mr. Dixon turn over to you any other books kept by him in connection with his employment during 1879 and 1880?

A—Yes, sir.

Q. [Showing another book to witness]—Is this one
410 of the books he turned over to you?

A—Yes, sir; that is a diary kept by him of his work.

Q—Was it a part of his duties to keep such a diary as that?

A—Yes, sir; and that book belongs to the office of the State Engineer's Department, and the other book also.

Q—Have you made during the present year, at any time, a measurement of the water flowing in Kern River at the Rio Bravo Ranch?

A—Yes, sir, on the 18th day of May, this year.

Q—Will you state what the amount of water was
411 flowing by that point at that time?

[Objected to by defendants on the ground that it is not rebuttal of any testimony introduced by defendants. The objection is sustained, and plaintiffs except.]

Mr. HOUGHTON—Now in following up the offer which we made yesterday in connection with the rod readings at that station, at the Rio Bravo Ranch, I offer to prove by this witness the amount of water running down Kern River and by the Rio Bravo Ranch during the years 1879, 1880 and 1881, up to the present time. I

412 suppose the same ruling will be made and the same exception taken?

The COURT—Certainly

By Mr. HOUGHTON. Q—If a line is run from a given line north, 25 degs. west, two hundred and seventy-three feet, and another line is run from the same point north, 10 degs. west, two hundred and seventy feet, can you tell me how far apart the respective terminations of those two lines would be?

A—I made the calculation a moment ago. Twenty-five feet.

413

Cross-examination of

J. D. SCHUYLER.

By Mr. HAGGIN. Q—You were speaking about those books. Is there anything else in this book than what you say Mr. Dixon reported to you or handed you?

A—[After examining book] Yes, sir; other matters. I know nothing of my own knowledge of the matters in those books. This book simply came to me with some entries in it, that purported to be by Mr. Dixon,
414 and that is the same as to the other book that was shown me.

Mr. HAGGIN—This book is marked: "1880. Irriga-"tion Statistics for Kern County. L. L. Dixon." The other is marked, "Dixon's Diary and Evaporation "Record; S. E. D., Field Notes, and party No. —."

Q—Those are the two books, are they?

A—Yes, sir.

Q—What instructions had Mr. Dixon to take those measurements and keep those records which are mentioned there?

A—Verbal instructions that I had given him.

415 Q—How did you happen to give them—was that a part of your official duty?

A—The conduct of the work here was left entirely to me and my judgment, and I gave such orders.

Q—You had no instructions yourself?

A—Yes, sir; I had general instructions that covered the ground.

Q—But you had no instructions to have these particular things made, did you?

A—Yes, sir; direct instructions to have statistics gathered of the amount of land irrigated, etc.

Q—Did you have any instructions from the State

Engineer's Department to gather the particular statistics that these books purport to give?

A—The statistics of Kern County, yes, sir; the instructions were given to me verbally.

Q—Did you ever instruct Mr. Dixon to go and make the measurements himself that are given in this book, or purport to be given, or was his authority simply to gather such information pertaining to these matters as he could?

A—Do you refer to the statistics of irrigation—to the quantity of land irrigated?

Q—Yes, sir.

A—He was not instructed to make any measurement of land, but to gather from the irrigators the amount of land irrigated and the method of irrigating, etc.

L. L. Dixon,

being recalled for plaintiffs in rebuttal, testified as follows:

[The book of statistics referred to by the last witness in his testimony is shown to this witness.]

By Mr. Houghton. Q—Are all on those two pages your handwriting?

A—All that is in ink is my handwriting.

By Mr. Haggin. Q—Is there anything else that is not in your handwriting on those two pages?

A—Yes, sir.

Mr. Houghton—I offer it in evidence as a public record: First, that part of it which is in the handwriting of the witness on these two pages, giving the statistics of irrigation, and parties irrigating land from the Beardsley Canal.

The Court—Do you object to the offer?

Mr. Flournoy—Yes, sir.

The Court - Upon what ground? State the ground so that the Reporter may get it.

Mr. Flournoy—First, that it is not a public record and not such a record as is required by law to be kept. Secondly, that any presumption that might otherwise be indulged in in its favor is destroyed by the statement of the keeper of the record himself, who states that the facts purported to be stated upon the record were not facts within his knowledge at the time they were stated, but were merely hearsay.

420 [The objection is sustained and plaintiffs except.]

Mr. HOUGHTON—Now, we desire to make the same offer as to each one of these canals in this book: the McCord, the Calloway, the Goose Lake, the McCaffrey, the Pioneer, the Dixon & James, the Johnson, the Dixon & Joyce, the Kern Valley Water Company, the Kern Island Canal, the South Fork Canal, the Cotton Ranch Canal, the Farmers' Canal, the Fish & Able Canal, the Spanish Canal, the Stine Canal, the Buena Vista Canal, the James Canal, the Meacham Canal and the Wilson Canal.

421 [The same rulings and the same exception by the plaintiffs.]

By Mr. HOUGHTON Q—Were these statistics which you gathered in connection with the other canals gathered in the same manner that they were in connection with the Beardsley?

A—Yes, sir.

By Mr. HAGGIN. Q—Were any of them taken by yourself?

A—No, sir; I think not. There might be one or two in there that I saw the land of, saw the land in cultivation.

422 Q—Are there any statistics about any one canal there that were taken by yourself?

A—I would have to look over them to tell. It has been a year since I saw the book. I don't know. I don't think there are any. I can tell by looking over. Wherever my writing is in here I got them.

By Mr. FLOURNOY. Q—The question is, whether there is any one canal that you took the entire statistics about, so as to be certain, of your own knowledge, that they are correct?

A—No, sir; I never took any— I don't understand the question.

423 By Mr. HAGGIN. Q—Then you know that there is not one canal in this book that you took the entire statistics of?

A—Yes, sir.

Mr. HAGGIN—Then, of course, we make the same objection.

The COURT—The same ruling as to the first.

[Plaintiffs except.]

By Mr. HOUGHTON. Q—Will you look at that book [showing], at the Beardsley Canal, and see if those are the names of the parties whom you ascertained irrigated land from that canal?

424 [Defendants object to the question.]

Mr. HOUGHTON—The witness testified yesterday as follows: * * * * *

"How did you get the names of those who irrigated?

"A—I went around and saw them. Q—On the "canals? A—I would go to the secretary or the "owner of the different canals and get their names." He says, "I went around and saw them."

Mr. FLOURNOY—He qualified that.

The COURT—You can ask how he got those names.

By Mr. HOUGHTON. Q—How did you get those names?

425 A—I got them from every person that was using water from the ditch sometimes. I didn't get them from every one of them. Sometimes I would meet one man and he would give me the name of a man that I never saw, and he would give me the number of acres that he had in. I never went to every one or all of them.

Q—Did you go along the canals and get the names of parties that were irrigating from that?

A—I went to some of them; yes, sir; but not always. I got them sometimes from one man, who knew more about another man's crop than he did himself. There
426 was a Dutchman over there that could not tell me anything about his crop, and I went to Mr. Beardsley and found out all about it. I went to him, but I could not understand him. I didn't go to all of these parties to ascertain that they were irrigating; I could not tell you all of them that I went to; I could tell you some of them.

Q—How many persons did you, in that report, report as irrigating from the Beardsley Canal?

Mr. HAGGIN—We object to that question?

The COURT—It is a matter of hearsay; but go on.

427 A—I have got thirteen names written out as irrigators, and then I have got two marked "ditto." That makes fifteen in all.

By Mr. HOUGHTON. Q—What is the next canal in that book?

A—The McCord.

Q—How many do you report as irrigating from the McCord?

Mr. HAGGIN—We object to this examination. The book is not in evidence, and the witness has no right to refresh his memory from it. If it was simply a question of what sort of a report is made, we object

428 to the witness testifying as to that, as being immaterial, and in no sense of the word rebuttal. If it is offered to establish the fact that somebody, or that such and such persons did irrigate, we object to it, and to the witness using the book, when it is shown that he did not make these records from facts within his own knowledge.

The COURT—I shall sustain the objection.

[Plaintiffs except.]

Mr. HOUGHTON—I propose now to ask the same question as to every canal in that book.

The COURT—The same ruling.

429 [Plaintiffs except.]

Mr. HOUGHTON—I will state the canals which I include in my offer: the McCord, the Calloway, the McCaffrey, the Goose Lake, the Railroad, the Wible, the Pioneer, the Dixon & James, the Johnson, the Dixon & Joyce, the Kern Valley Water Company, the Kern Island Canal, the South Fork Canal, the Cotton Ranch Canal, the Farmers' Canal, the Fish & Able Canal, the Stine Canal, the Buena Vista Canal, the James Canal, the Meacham Canal and the Wilson Canal; and we ask that this book be identified, so that the reporter can copy the separate pages. Of course

430 we only offer so much of this as is in the handwriting of the witness, which he says is in ink.

The WITNESS—I don't know; there may be some in lead pencil. That was only on that page that I spoke of.

Q—Take the McCord; all that there is in ink on that page is in your handwriting?

A—Yes, sir; all that is in ink; and here is a note in lead pencil and there are one or two places where it has been corrected in lead pencil and that I corrected.

Q—Give the notes in lead pencil that are in your

431 hand writing.

A—Yes, sir; under the heading of "Remarks," "39 acres volunteer wheat, which was not irrigated."

Q—Turn to the next page. What canal is that on the next page?

A—The Calloway.

Q—Is everything there in ink in your handwriting?

A—Yes; and some in lead pencil too.

Q—Give the notes in pencil?

A—I will have to go through some of these figures here.

The COURT—Can't the witness indicate to the Reporter when he makes a copy of it?

Mr. HOUGHTON and Mr. HAGGIN—Yes, sir.

Mr. HOUGHTON—Then I understand that there is no objection to his pointing out to the Reporter such portions of each page there, as are in his handwriting; and to have that book identified as coming from the State Engineer's Office, I will give the title, "1880, Irrigation Statistics of Kern County, L. L. Dixon."

[The statistics referred to were afterwards copied by the Reporter, as follows:]

BEARDSLEY CANAL

Names.	Section, Township and Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden.....	Orchard.....	Total land Cultivated.	Total land Irrigated.....	No. of times Irrigated....	Remarks.
J. B. Haggin.....	15.29.27	8	200	8	0	0	0	1	0	217	217	1	
A. Flippin.....	8.29.28	25	10	0	3	0	0	1	1	40	40	1	
S. A. Wilson.....	7.29.28	3.5	5	1	0	0	0	2	0. 5	12	12	1	
J. J. Darnell.....	7.29.28	8	0	15	0	0	0	1	1	25	25	1	
V. Amey & Co.....	13.29.27	10	0	12	1	0	0	0	0	23	23	1	
" "	7.29.28	15	10	5	0	0	0	0. 5	2	32.5	32.5	1	
" "	18.29.28	30	0	4	0	0	0	1	1	36	36	1	
D. J. Dumble	13.29.27	10	0	20	0	0	0	2	8	40	40	1	
E. M. Roberts.....	13.29.27	8	0	0	0	0	0	1	1	10	10	1	
L. A. Beardsley.....	14.29.27	20	0	10	0	0	0	0. 5	1. 5	32	32	1	
Thos. Star..	13.29.27	20	0	0	0	0	0	0	0	20	20	1	
A. M. Donaldson. ..	14.29.27	8	12	5	2	0	0	0. 5	0. 5	28	28	1	
Walter James.....	10.29.27	8	19	0	0	0	0	0	1	28	28	1	
Wm. Kelly.....	8.29.28	8	0	0	0	0	0	0. 5	0. 5	9	9	1	
O. Z. Shockey.....	14.29.27	8	10	0	7	0	0	0.25	0.25	25.5	25.5	1	
McCORD CANAL.													
J. B. Haggin.....	21.29.27	17	39	16	0	0	0	1	4	77	38	1	Thirty-nine acres volunteer wheat which was not irrigated.
Otto Thronson.....	22.29.27	5	15	0	5	0	0	0	1	26	26	1	
J. B. Haggin.....	22.29.27	10	150	0	0	0	0	0	0.25	160.25	160.25	1	
A. Tyler.....	8.29.27	10	0	0	0	0	0	0	0	10	10	1	
Furguson & Nelson.	8.29.27	30	0	0	10	0	0	0	0	40	40	1	
R. T. Norris.....	8.29.27	15	15	0	0	0	0	0	0	30	30	1	
C. Greeley.....	6.29.27	10	4	10	10	0	0	0.5	0. 5	35	35	1	
D. Wagner.....	6.29.27	5	10	0	0	0	0	0	0	15	15	1	
W. P. McCord.....	23.29 27	10	0	0	6	0	0	0	0	16	16	1	
Chas. Maul.....	23.29.27	23	0	0	0	0	0	0	0	23	23	0	No one on the ranch.
H. A. Blodgett.	23.29.27	6	0	0	0	0	0	0	0	6	6	0	No one on the ranch.
E. M. Roberts.....	13.29.27	60	0	30	0	0	0	0	0	90	90	1	
Sol. Jewett.....	27.29.27	10	140	0	40	0	0	0	0	190	190	2	

CALLOWAY CANAL.

Names.	Section, Township and Range.	Alfalfa.....	Wheat	Barley.....	Corn	Rye	Oats.....	Garden	Orchard.....	Total land Cultivated..	Total land Irrigated	No. of times Irrigated...	Remarks.
Mrs. Adams.....	27.28.26	0	300	.....	.....	.....	.....	.....	.....	300	300	1	These are J. B. Haggin's renters.
Fred Steinman.....	1.29.26	0	225	.....	.....	.....	.....	.....	.....	225	225	1	Where the number of acres exceeds 640
J. F. Creasey.....	17.26.25	0	754	.....	.....	.....	.....	.....	.....	754	754	1	the renter has taken some from the ad-
Jacob Hayes.....	19.26.25	0	895	.....	.....	.....	.....	.....	.....	895	895	1	joining sections.
J. C. Taylor.....	21.26.25	0	705	.....	.....	.....	.....	.....	.....	705	705	1	
Niel & Thomas.....	26.26.25	.....	449	.....	.....	.....	.....	.....	.....	449	449	1	
E. Marley.....	27.26.25	.....	582	100	.....	.....	.....	.....	.....	682	682	1	
Joel McMillen.....	29.26.25	.....	490	100	.....	.....	.....	.....	.....	590	590	1	
Poso Ranch.....	3.27.25	.....	1552	.....	100	cotton 12	.....	10	5	1679	1679	1	
E. B. Bentley.....	21.27.25	.....	543	.....	.....	.....	.....	.....	.....	543	543	1	
J. T. Campbell.....	29.27.25	.....	320	.....	.....	.....	.....	.....	.....	320	320	1	
G. J. Hawkins. ...	33.27.25	.....	76	.....	.....	.....	.....	.....	.....	76	76	1	
W. A. Berry.....	3.28.25	.....	268	.....	.....	.....	.....	.....	.....	268	268	1	
Wilson & Canady...	13.28.25	.....	156	.....	.....	.....	.....	.....	.....	156	156	1	
J. B. Haggin.....	19.29.27	0	640	0	0	0	0	0	0	640	640	1	A part of Belle View Ranch.
Joe St. Mary.....	12.29.26	.....	300	.....	.....	.....	.....	.....	.....	300	300	1	
—— Akers.....	35.28.26	.....	75	.....	.....	.....	.....	.....	.....	75	75	1	
A. Overacker.....	34.28.26	.....	200	.....	.....	.....	.....	.....	.....	200	200	1	Partners.
L. L. Luick.....	35.28.26	.....	125	.....	.....	.....	.....	.....	.....	125	125	1	

N. B.—There is little or no barley planted on this canal this season; crops mostly wheat.
Poso Ranch had 12 acres cotton.

These statistics gotten from T. R. Fillebrown.

Names.	Section, Township and Range.	Alfalfa	Wheat.....	Barley.....	Corn	Rye.....	Oats	Garden	Orchard	Total land Cultivated..	Total land Irrigated	No. of times Irrigated...	Remarks.
McCAFFREY CANAL.													
Wm. Goode	22.29.27	65	0	0	4	0	0	0.5	2	71.5	71.5	1	Sub-irrigated.
Jas. McCaffrey	22.29.27	65	26	0	0	0	0	0	2	93	93	1	
A. P. Bernard.....	23.29.27	0	0	60	0	0	0	0	0	60	60	1	
—— Gamlin.....	26.29.27	0	80	0	0	0	0	0	0	80	80	1	
Sol. Jewett.....	27.29.27	40	100	10	0	0	0	0	0	150	150	1	
EMORY CANAL.													
E. H. Emory	24.29.26	10	0	0	10	0	0	0.5	4.5	25	25	1	
JONES & TUCKEY.													
J. B. Haggin	26.29.26	0	0	0	20	0	0	0	0	20	20	1	Linch Ranch.
RAILROAD, GOOSE LAKE AND WIBLE'S CANALS.													
W. W. Gunn.....	26.29.25	10	0	30	0	0	0	0	0	40	40	1	Goose Lake.
J. Wareham.....	30.29.26	8	0	10	0	0	0	0	0	18	18	1	" "
S. W. Wible	32.29.26	200	60	40	0	0	0	0	0	300	300	1	Mostly from the Pioneer.
L. G. Murdick.....	28.29.26	40	0	20	0	0	0	0	0	60	60	1	" " Goose Lake.
A. J. McClure.....	32.29.26	10	5	25	0	0	0	0	0	40	40	1	" " " "

PIONEER CANAL.

Names.	Section, Township and Range.	Alfalfa	Wheat	Barley.....	Corn	Rye	Oats.....	Garden.....	Orchard.....	Total land Cultivated.	Total land Irrigated	No. of times Irrigated...	Remarks.
H. H. Hubbard.....	33.29.25	100	0	0	15	0	0	0	0	115	115	1	
G. Shinn.....	34.29.26	50	0	0	20	0	0	0.5	0.5	71	71	1	
S. W. Wible.....	32.29.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	This ranch deducted from this on Wible Canal.
Jno. Burcham.....	32.29.26	75	0	0	0	0	0	0	0	75	0	0	No one on the Ranch.
—— Nelson.....	2.30.25	300	0	0	0	0	0	0	0	300	300	1	
D. G. McLean.....	35.29.25	200	0	0	15	0	0	0	1.5	216.5	216.5	1	
Kern Valley Bank..	34.29.25	360	0	0	0	0	0	0	1	361	361	1	
J. O. Miller	3.30.25	0	350	0	0	0	0	0	0	350	350	1	J, B. Haggin's renter.
M. Boyher.....	4.30.25	0	90	10	0	0	0	0	0	100	100	1	" " "
J. P. Dixon	12.30.24	100	10	60	0	0	0	0	1	171	171	1	
McLung Ranch.....	1.30.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. B. Haggin's property.
McLung Ranch.....	3&4.30.26	1000	460	600	100	0	40	4	6	2210	2210	2	
McLung Ranch.....	5&6.30.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Christy & Wise	34.29.26	10	0	0	0	0	0	0	0	25	10	1	

The McLung Ranch watered by Dixon & James' Canal also.

DIXON & JAMES CANAL.

McLung Ranch.....	(See Pioneer Canal.)	J. B. Haggin's Ranch; this canal cuts into the Johnson canal.

JOHNSON CANAL.

Names.	Section, Township and Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden.....	Orchard.....	Total land Cultivated..	Total land Irrigated....	No. of times Irrigated..	Remarks.
C. F. Brown.....	8.30.26	60	0	0	0	0	0	0	0	60	60	1	
J. Pensinger.....	8.30.26	40	5	10	25	0	0	0	0.5	80.5	80.5	1	
W. W. Frazier.....	8.30.26	40	0	0	0	0	0	0	0	40	40	1	
W. W. Drury.....	8.30.26	25	0	0	0	0	0	0	0	25	25	1	
H. A. Blodg tt.....	18.30.26	25	0	80	0	0	0	0	0	105	105	1	
G. W. Bevis.....	18.30.26	10	0	0	0	0	0	0	0	10	10	0	No one on Ranch.
H. Hill.....	18.30.26	20	0	12	12	0	0	0	0	44	44	1	
R. C. May.....	14.30.25	20	0	12	16	0	0	0.5	1.5	52	52	1	
L. L. Dixon.....	14.30.25	25	0	20	0	0	0	0	0	45	45	1	

DIXON & JOICE CANAL.

Buena Vista Ranch.	16		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. B. Haggin's Ranch.
" " "	17													
" " "	18		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
" " "	19	30.25	1000	0	70	0	0	0	1.5	2.5	1074	1074	1	Used water from Johnson also.
" " "	20		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
" " "	21		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
J. P. Dixon.....	12.30.24		100	10	60	0	0	0	0	1	171	171	1	Used water from Pioneer also.

KERN VALLEY WATER CO'S CANAL.

S. W. Wible.....	14.30.24	0	0	30	0	0	0	0	0	30	.....	1	
J. C. Crocker.....	10 and 11.30.24	0	0	200	0	0	0	0	0	200	.....	1	

KERN ISLAND CANAL.

NAMES.	Sec.	Townsh.	Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden....	Orchard...	Total Land Cultivated	Total Land Irrigated.	No. of times Irrigated.	REMARKS.
W. H. Broad	32	29	28	60	0	0	0	0	0	0.25	0.25	60.5	60.5	2	
Kern Valley Bank	31	29	28	0	10	80	80	0	0	20	0	190	190	2	Corn planted on barley land.
A. & S. Weil	32	29	28	40	0	0	0	0	0	0	0	40	40	1	
P. A Stine	6	30	28	0	0	0	40	0	0	0	0	40	40	1	
B. Brundage	29	30	28	100	0	0	0	0	0	0	0	100	100	1	
Pierpont Bro. & Hall	32	30	28	180	160	20	80	0	0	2	1	443	443	1	
Day & Doubleday	30, 31	30	28	13	42	10	10	0	0	0	5	80	80	1	
P. D. Jewett	31	30	28	40	250	0	50	0	0	0.5	1.5	342	342	1	
Sol. Jewett	12	30	27	300	0	0	0	0	0	0	0	300	300	1	Brink Ranch.
Hutchinson	6	31	28	0	20	5	0	0	0	0	0	25	25	1	
Shields	7	31	28	60	220	0	0	0	0	0	0	280	280	1	
Chas. Kerr	21, 28, 33	31	28	800	700	160	0	0	0	0	0	1660	1660	1	
S. M. Judd	24	31	27	0	50	30	0	0	0	0	0	80	80	2	Uses water from Farmers also.
E. Tibbetts	1	30	27	65	5	0	5	0	0	6	22	103	103	2	
J. Chester Ranch	36	29	27	300	0	190	0	0	0	10	2	502	502	1	Kern Valley Bank owns it.
Allen Rose	25	29	27	60	0	0	12	0	0	2	6	106	80	1	Reeder Ranch.
Houghton	19	29	28	0	0	0	50	0	0	2.5	0	52.5	52.5	2	
F. A. Tracy	4, 9	30	28	10	0	95	95	0	0	20	5	130	130	2	Corn planted on barley ground.
Brower, Jastro & Webb	31	29	28	100	50	30	40	0	0	10	0	230	230	1	
R. Hudnut	19	29	28	60	0	0	10	0	0	0	0	70	70	1	
Livermore Ranch	5	31	28	1800	1500	500	200	0	0	5	35	4040	4040	2	J. B. Haggin's prop.
	17, 18	31	28												
	20, 29	31	28												
	30, 31	31	28												
	32	31	28												
J. B. Haggin	1	31	27	0	200	25	10	0	0	0	0	235	235	1	Tenants of J. B. Haggin.
	36	30	27	0	350	75	0	0	0	0	0	425	425	1	
	25	30	27	0	460	50	0	0	0	0	0	510	510	1	

SOUTH FORK CANAL.

NAMES.	Sec.	Townsh.	Range.	Alfalfa.....	Wheat.....	Barley.....	Corn	Rye.....	Oats.....	Garden.....	Orchard.....	Total Land Cultivated.	Total Land Irrigated..	No. of Times Irrigated..	REMARKS.
J. C. Crocker.....	22, 23, 26	30	27	400	0	290	0	0	0	20	10	720	140	1	Rest sub-irrigated.
E. M. Crocker.....	2	31	27	80	0	400	20	0	0	10	0	510	510	1	
E. M. Crocker.....	20	30	27	100	0	0	0	0	0	0	0	100	100	1	
D. Troy.....	22, 23	30	27	170	0	60	0	0	0	5	5	240	60	1	
Kern Valley Bank.....	36	29	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chester Ranch.
L. M. Owen.....	26	30	27	200	0	15	0	0	0	0.5	1	216.5	216.5	0	Sub-irrigation.
Mrs. Bludworth.....	10	31	27	15	40	0	0	0	0	0	0	55	55	1	
E. M. Ashe.....	34	30	27	0	0	15	0	0	0	0	0	15	15	1	

NOTE.—K. V. B. (Chester Ranch is put in on Kern Island Canal, so I deduct the acreage from this canal.)

COTTON RANCH CANAL.

Sol. Jewett.....	18, 19	29	28	15	0	100	75	0	0	2	8	200	200	1	
P. D. Jewett.....	18, 19	29	28	75	25	80	80	0	0	4	6	190	190	2	Corn planted after barley cut and on same land.
J. B. Haggin.....	19	29	28	720	0	0	60	0	0	2	10	792	792	2	Cotton and Anderson Ranches
	30	29	28												
	24	29	27												
	25	29	27												

FARMERS' CANAL.

NAMES.	Sec.	Town.	Range.	Alfalfa	Wheat	Barley	Corn	Rye	Oats	Garden	Orchard	Total Land Cultivated.	Total Land Irrigated.	No. of times Irrigated.	REMARKS.
S. A. Burnap	34	30	27	80	65	0	50	0	0	0.25	0.25	110.5	110.5	1	Wheat sowed with alfalfa.
C. B. Caldwell	34	31	27	30	5	45	0	0	0	1	2	83	83	1	
Carlock & Robb	8	31	27	50	50	25	0	0	0	1	2	128	128	1	
J. W. Garlic	4	31	27	30	224	6	0	0	0	0	0	260	260	1	
S. H. Hickcox	20	31	27	45	0	15	0	0	0	0	0.5	60.5	60.5	1	
S. J. Hodges	12	31	27	40	0	30	0	0	0	0	0	70	70	1	
S. M. Judd	24	31	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Uses water from K. I. Canal.
P. R. Keiffer	24	31	27	200	0	0	30	0	0	0	0.5	230.5	230.5	1	
F. P. May	4	31	27	25	1.5	10	8	0	0	1.5	1.5	47.5	47.5	1	
Sol. Jewett	4	31	27	30	120	0	0	0	0	0	0	150	150	1	
G. K. Ober	14	31	27	20	0	0	10	0	0	0.25	4	34.25	34.25	1	
P. Randall	14	31	27	107	5	5	7	0	0	1	1.5	126.5	126.5	1	
O. C. Shelley	28	31	27	40	0	25	0	0	0	1.5	0.5	67	67	1	
H. Wolfe	26	31	27	25	0	5	30	0	0	0.5	0.5	61	61	1	
S. J. Starkes	14 & 34	30	27	0	0	0	0	0	0	0	0	0	0	0	
W. Stoner	34	30	27	10	0	0	0	0	0	0	0	10	10	0	No one on the ranch.
J. B. Rumpford	22	30	27	0	0	0	0	0	0	0	20	20	20	1	
O. T. Chubb	30	31	27	60	50	10	0	0	0	3	3	126	126	1	
J. D. Stockton	30	31	27	150	50	0	0	0	0	3	3	206	206	1	
— Doe	22	31	27	0	0	35	0	0	0	0	0	35	35	1	
J. B. Haggin	23	31	27	0	275	30	0	0	0	0	0	305	305	2	Renters of J. B. Haggin.
"	24	31	27	7	60	10	20	0	0	0	0	97	97	1	
"	2	31	27	25	95	15	0	0	0	0	0	135	135	1	
"	35	30	27	0	430	55	15	0	0	0	0	500	500	1	
R. T. Harrold	34	30	27	6	0	0	0	0	0	0	0	0	6	0	

S. M. Judd uses water from Kern Island; therefore, his acreage is deducted from this canal.

FISH & ABLO, OR SPANISH CANAL.

NAMES.	Sec.	Towns.	Range.	Alfalfa.....	Wheat.....	Barley.	Corn	Rye	Oats.....	Garden.....	Orchard.....	Total Land Cultivated.	Total Land Irrigated...	No. of Times Irrigated...	REMARKS.
Thomas Castro.....	12	30	27	15	0	10	0	0	0	0.5	0	25.5	25.5	1	
H. A. Cross.....	14	30	27	100	0	20	0	0	0	10	10	140	140	1	
Coronado.....	12	30	27	5	0	15	0	0	0	0.5	0	20.5	20.5	1	
P. D. Jewett.....	14	30	27	100	65	20	25	0	0	0	0	210	210	1	
F. Roper.....	1, 2	30	27	30	0	40	100	0	0	0	0	170	170	1	

BAKER & NOBLE AND GATES CANAL.

J. B. Haggin.....	34 35	29	27	750	0	0	0	0	0	0	0	750	750	1	Anderson Ranch.

STINE CANAL.

Names.	Sec.	Towns.	Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden.....	Orchard.....	Total Land Cultivated..	Total Land Irrigated...	No. of Times Irrigated...	Remarks.
Chas. Proft.....	2	30	27	46	0	6	0	0	0	0	0	52	52	1	
P. Corti.....	18	31	27	100	60	10	0	0	0	3	25	173.5	173.5	1	
J. Ellis.....	6	31	27	50	0	0	0	0	0	2	8	60	60	1	
V. Barker..... ...	12	31	26	20	20	20	0	0	0	0	0	60	60	1	
Mrs. Zumalt.....	6	31	27	20	0	35	0	0	0	0	0	35	35	1	Alfalfa sowed with barley.
B. St. Mary.....				12	0	0	0	0	0	1	0	13	13	1	
J. A. Clark.....	30	30	27	30	0	0	0	0	0	0	0	30	30	1	
H. Bowers.....	30	30	27	30	20	10	10	0	0	0	0	70	70	1	
G. F. Thornton.....	10	30	27	75	0	50	5	0	0	2	24	156	156	1	
R. Ramsey.....	10	30	27	40	0	66	32	0	0	2	3	143	143	1	
Jas. Campbell.....	2	30	27	10	0	100	40	0	0	1	1	152	152	1	
A. A. Bennett.....	2	30	27	60	0	20	0	0	0	0	0	80	80	1	
J. B. Haggin.....	11	30	27	0	350	0	0	0	0	0	0	350	350	1	Renters of J. B. Haggin.
J. B. Haggin.....	31	30	27	0	200	90	0	0	0	0	0	290	290	1	" " " "
J. B. Haggin.....	29	30	27	0	190	0	0	0	0	0	0	190	190	1	" " " "
J. B. Haggin.....	7	31	27	7	175	10	0	0	0	0	0	192	192	1	" " " "
J. B. Haggin.....	5	31	27	0	475	15	0	0	0	0	0	490	490	1	" " " "
J. B. Haggin.....	9	31	27	0	570	40	10	0	0	0	0	550	550	1	" " " "
J. B. Haggin.....	16	31	27	0	475	0	0	0	0	0	0	475	475	1	" " " "
J. B. Haggin.....	17	31	27	0	375	0	0	0	0	0	0	375	375	1	" " " "
J. B. Haggin.....	19	31	27	0	300	0	0	0	0	0	0	300	300	1	" " " "
J. B. Haggin.....	3	31	27	0	400	100	50	0	0	0	0	550	550	1	" " " "
J. B. Haggin.....	27	31	27	0	200	100	40	0	0	0	0	340	340	1	" " " "
J. B. Haggin.....	13	31	27	6	225	10	40	0	0	6	0	287	287	1	" " " "
J. B. Haggin.....	11	31	27	0	340	150	16	0	0	0	0	506	506	1	" " " "
J. B. Haggin.....	13	30	27	0	250	50	0	0	0	0	0	300	300	1	" " " "

475 474 473 472

BUENA VISTA CANAL.

NAMES.	Sec.	Townsh.	Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden.....	Orchard.....	Total Land Cultivated.	Total Land Irrigated..	No. of Times Irrigated..	REMARKS.
Myers & Frazier	18	30	27	100	80	12	8	0	0	0.5	3	203.5	203.5	1	
Peter O'Hara.....	18 & 30	30	27	50	20	10	20	0	0	1	2	103	103	1	
J. R. Watson....	30	30	27	80	50	80	12	0	0	0	0.5	222.5	222.5	1	
	24	30	26												
W. W. Frazier....	30	30	27	20	0	0	10	0	0	0	0	30	30	1	
Wm. Canfield...	26, 27														
	34 & 25	30	26	500	100	0	3	0	0	2	3	608	608	1	
D. & W. Lowell...	10	31	26	60	0	30	2	0	0	1	0	93	93	1	Sowed alfalfa with barley.
Dysart	18	30	27	25	0	0	0	0	0	0	0	25	25	1	
J. B. Haggin....	3														
	4	30	27	950	300	650	75	80	50	10	5	2120	2120	2	Stockdale Ranch.
	9														

JAMES RANCH.

J. B. Haggin....	1 & 12	30	26	1444	590	700	250	Cotton 50	0	15	15	3034	3034	2	Belleview Ranch.
	5 & 6	30	27												
	7 & 8	30	27												
	13	30	26												

476 477 478 479

483 482 481 480

MEACHAM CANAL.

NAMES.	Sec.	Towns.	Range.	Alfalfa.....	Wheat.....	Barley.....	Corn.....	Rye.....	Oats.....	Garden ...	Orchard.....	Total Land Cultivated..	Total Land Irrigated...	No. of Times Irrigated...	REMARKS
C. Christensen.....	14	30	26	65	375	125	50	0	0	1	4	620	620	1	
J. N. King.....	22	30	26	35	20	0	12	0	0	1	0	68	68	1	
M. Faucett.....	22	30	26	30	20	0	0	0	0	1	0	51	51	1	
J. Gorman.....	12	30	26	180	0	0	0	0	0	0	0	180	180	1	
King & Brush.....	22	30	26	0	0	10	3	0	0	0	0	13	13	1	

WILSON CANAL.

Chas. Bell.....	2	30	26	10	0	0	0	0	0	0	0	10	10	1	
G. W. Parish.....	2	30	26	10	0	0	0	0	0	0	0	10	10	1	
Fanning.....	2	30	26	10	0	0	0	0	0	0	0	10	10	1	

484 Q—You have seen this diary; that was shown to you yesterday, was it not?

A—No, sir.

Q—Is this a diary kept by you in connection with your duties as an officer of the State Engineer's Department in 1879?

[Showing.]

A—There are some parts of it that were not kept by me, that I want to see.

[Examines it.]

Q—That is a book which you kept during that year?

A—Yes, sir.

485 Q—You testified yesterday that you kept a diary, and that the facts in it you set down about the time, and that sometimes the diary was left in town, but that you put them down while it was fresh in your memory. Is this the book?

A—That is the book I testified about; yes, sir. I think so, up to July 16th, 1879.

Q—Do you remember on any occasion, when you were making these trips or keeping account of these gauge readings, at any time seeing a wing-dam across Kern River, at the head of the Calloway, which threw all of the water of Kern River into the Calloway Canal?

486 Mr. HAGGIN—We object to that, because, in the first place, it is not rebuttal; in the second place, they have gone very fully into that question themselves in the direct examination.

The COURT—I sustain the objection.

[Plaintiffs except.]

By Mr. HOUGHTON. Q—Do you remember during the year 1879, at any time, that a wing-dam was thrown across Kern River, at the head of the Calloway, which threw all of the water into what is known as the McCaffrey Slough, and after it passed down that slough by the head-gate of the Farmers' Canal, that a cut was

487 made which turned that water back into the river again?

A—Are you speaking of 1879?

Q—Yes, sir.

A—I have seen wing-dams there. I have seen it sometimes; whether it was in 1879 or 1880. I kept the gauge readings two years. I could not swear which one it was, in fact, for I made no note of it.

[The question is again read to the witness.]

A—I understand the question, but I am not quite certain whether it was in that year or the year after.

488 Q—It was one or the other, was it?

A—Yes, sir. There was a gate made there to let the water out of the Calloway.

Q—I will show you this memorandum to refresh your memory and see whether you can tell me when it was done.

Mr. HAGGIN—If you are going to show any memoranda from this book, I desire to ask the witness some questions about it.

Q—Mr. Dixon, are all those memoranda in that book, up to that time you gave—the 19th of July, I think it was—made by yourself?

489 A—I think so. I can tell you by looking over it.

Q—Do you know whether the notes, the entries in this book, were made of facts which you knew yourself, or were they facts which you gathered from others, any of them?

A—Sometimes they were facts I would get from other men. Sometimes a sanquero would tell me his ditch was broken, and I would put it down in there without going to find the break; sometimes I would see it. There are statements given in this book that I don't know the truth of myself.

Mr. HAGGIN—That is the book you propose to hand
490 him?

Mr. HOUGHTON—That is the one.

[Referring to a page in the book.]

By Mr. HAGGIN. Q—Will you see if the facts that are stated in that, are facts which you know yourself, or what somebody else told you?

A—On this page here?

[Referring to book.]

Q—On those two pages, I suppose.

A—I made these myself.

Mr. HOUGHTON. Q—Can you state now whether it was in 1879 or 1880?

491 A—It was done in 1879, sir.

Q—What time?

A—March 3. That wing-dam there.

[Pointing to the book.]

Q—This memorandum and diagram which appears in this book under the head of March 3d, 1879, both were made by you?

A—Yes, sir.

Q—Do you remember, Mr. Dixon, that the water at any time in 1879 was shut off from the McCord and Beardsley Canals?

492 A—Do I remember any time?

Q—Yes, sir.

A—I don't know that I can call the time, but I know that the water was shut off once or twice there at the request of my brother. My brother got them to shut it off.

Q—Do you remember whether at that time you made any note or memoranda in connection with that?

A—I could not remember all those things.

Q—I wish you would look at that, and see whether that memorandum or note was made at that time. (Showing the book.) Was that made by you under the
493 head of the 14th of March?

A—I don't know whether it is. I want to read it and see.

Q—Are those notes from facts which you knew yourself, of your own knowledge, and not what anybody told you?

A—No, sir; they were told me.

Mr. HAGGIN—We object to the witness using it.

The COURT—The objection is sustained.

By Mr. HOUGHTON. Q—Who gave you the informationwhich you have given in here?

A—I don't remember who it was that told me; I
494 didn't get the information from Haggin & Carr, or either of them. I don't know anything about the facts that are stated in here, as to by whose order that water was shut off; I don't know whether it was Haggin & Carr's orders or not; that entry is mere hearsay, and so far as this record is concerned, I know nothing of that myself, whether it was by the order of Haggin & Carr or not. My brother at that time was at work for himself.

Cross-Examination of

495

L. L. DIXON.

By Mr. HAGGIN. Q—You were asked if you knew or if you remembered about all the water of the river being turned into the Calloway Canal, that portion of it known as the McCaffrey Slough, and a cut being made about the head of the Farmers' Canal. Do you know of all the water of the river being turned into the Calloway at any time?

A—I never saw at any time all the water cut off, turned into the Calloway.

496 Q—Then in the answer that you gave did you mean more than to refer to the fact that there had been a cut made from the McCaffrey Slough into the river?

A—I think in my answer that I stated there was a cut there to turn the water out of the Calloway into the the river.

Q—Did you mean to confine your answer to that portion of the question?

A—Yes, sir.

Q—Then did you mean to answer as to all the water of the river being turned into the McCaffrey Slough?

A—No, sir.

497 Q—Now, as to this picture as to which Mr. Houghton asked you whether it was made by yourself, will you look at that again, and see if all that was made by yourself?

A—Yes, sir.

Q—Did it correctly represent everything that was there?

A—Well, it did not represent the exact distance. I just drew it by looking at it.

Q—Does it represent the wing-dam? Is that intended to be a wing-dam run across the river?

A—(Referring to book.) That is a sand dam;

498 marked there as a sand dam, running up nearly across.

Q—You do not pretend to give the distance across, or anything?

A—No, sir. And that is a brush dam there. (Showing.)

Mr. Houghton—To save any question, I offer that diagram in evidence.

Mr. Haggin—We object to it as not being established.

Q—Is that a correct picture of it? You say it is not correct?

A—It would not be exactly correct; I just sat there

499 on the railroad bridge, and drew it.

By Mr. Houghton. Q—Did you intend to draw that correctly when you made that draft?

A—I intended to draw it as near like the thing looked as I could.

Q—And you did so, did you, as near as you could?

A—I drew it on the paper as you see it there. The distances are not marked.

Q—Outside of the distances, that is about a correct diagram of what was represented on the ground, isn't it?

500 A—Well, I have not got any banks or anything on the river marke there.

Q—Oh, I don't understand that it is a piece of topographical work. I understand this is as correct a diagram as you could make in that manner of what appeared in connection with the river?

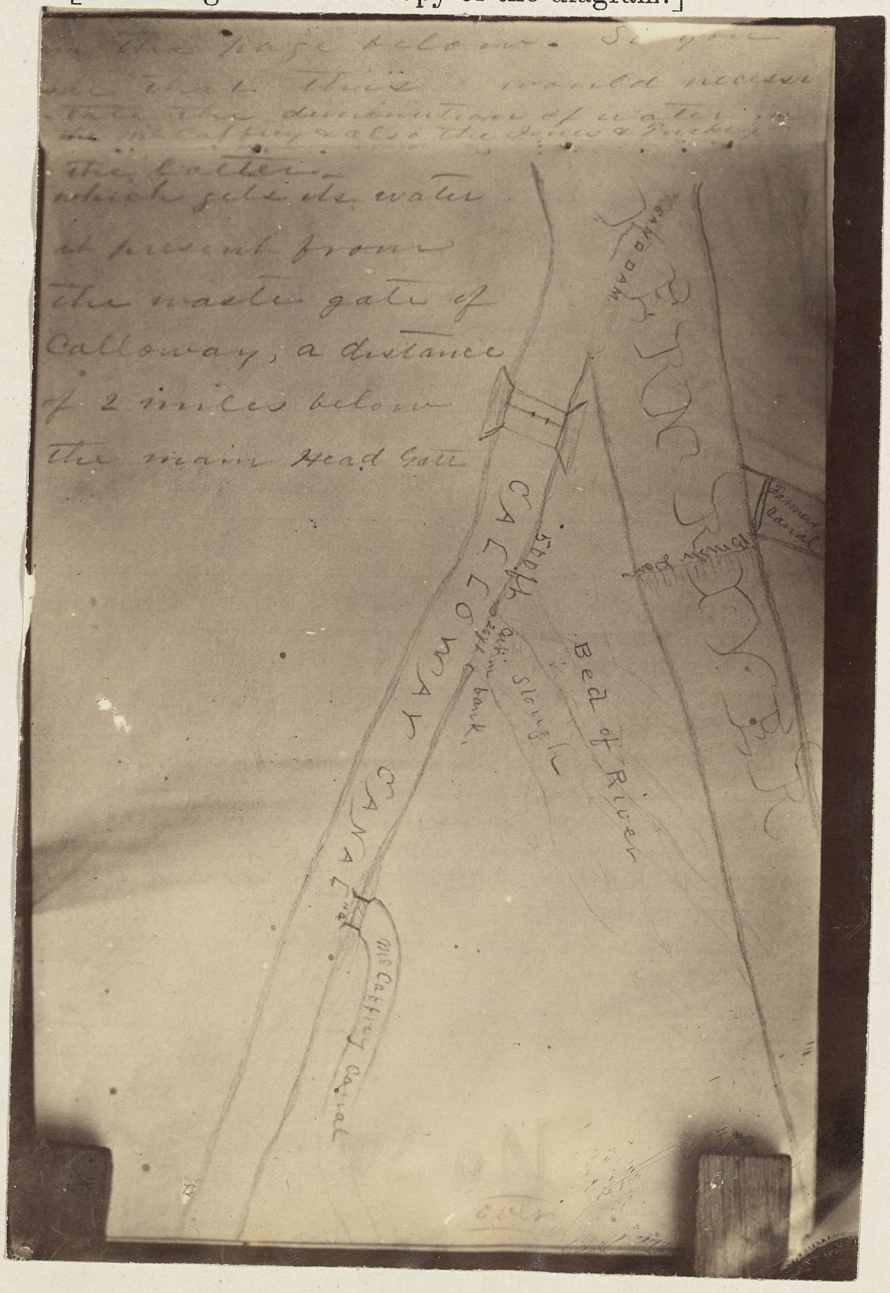
A—Yes, sir.

Q—And the wing-dam and the cut?

A—Yes, sir.

Mr. HOUGHTON—We offer it in evidence, if the Court please. It is marked "March 3d, 1879."

501 [Following is a traced copy of the diagram.]



504 Mr. HOUGHTON—We desire to now make an offer in connection with the certificates of purchase. I think it was made at the time I made the offer, to make the offer in connection with them, to connect that title, where we have not done so, with the patents or the grantees of those patents.

Mr. MCALLISTER—We think we made the proposition yesterday; we want to be certain.

Mr. GARBER—I didn't so understand it. If they wish to offer any further proof, I wish them to offer it by questions.

Mr. MCALLISTER—We have offered the documents.

505 Mr. HOUGHTON—The offer was made yesterday.

Mr. FLOURNOY—The documents were not presented.

Mr. HOUGHTON—The statement was made in connection with those certificates; we proposed to connect them with our patents.

Mr. GARBER—In what way?

Mr. HOUGHTON—By proper assignments.

Mr. GARBER—Oh, I don't care anything about that.

The COURT—That was done yesterday.

Mr. GARBER—That was done yesterday.

Mr. MCALLISTER—That is all we desire to do.

Mr. HOUGHTON—That is our case, if the Court please.

506

GEORGE SMITH,

Being called as a witness for defendants in rebuttal, and sworn, testified as follows:

By Mr. FLOURNOY. Q—Were you with Mr. McCray, Mr. Smith, and others in running levels and making cross-sections—with the two Smiths and Mr. Wright—making cross-sections across the Swamp Land District No. 121, on the 21st and the 22d of May?

507 A—Yes, sir; we started on the 21st; I went with them across; On that trip I carried the forward end of the chain; it was a surveyor's chain, one hundred feet, I think—a steel tape; I carried the forward end of that chain all the way across; I carried it until the evening of the 22d, until within about two hundred feet or so of the bank of the canal.

Q—Was that chain a perfect chain when you started from the east side?

A—Yes, sir.

408 Q—Did it remain a perfect chain until you got through?

A—No, sir.

Q—Was it broken?

A—Yes, sir; a part of it.

Q—At what point? Do you recollect at what station that chain was broken?

A—Yes, sir.

Q—At what station?

A—When we had measured fifteen hundred feet from the starting point?

Q—Just describe to the Court how it was broken.

409 A—Well, at each end of the chain there is a cross-bar you get inside of your fingers, and put the chain on the ground; that pulled apart from the chain, and in consequence I had to take hold of the chain itself.

Q—How did you carry along the chain after that was pulled apart? How did you carry the end of the chain?

A—By taking a round of it around my hand.

Q—Taking a round of it around your hand?

A—Yes, sir; when I would go to bring the chain along.

Q—Did you do that the balance of the distance across

410 in that measurement?

A—No, sir; until the end of the first day's work.

Q—Was the chain mended then?

A—No, sir.

Q—You carried it in that fashion up to the end of the first day's work?

A—Yes, sir.

Q—Do you recollect how far that was?

A—I think it was to the first cross-section on that profile.

Q—What is that?

A—To the first cross-section place; I think 70 plus

411 something, or 69 plus 50.

Q—It was the whole of day's work of the first day?

A—Yes, sir.

Q—Now, in wrapping that, taking a turn around your hand to carry it, about how much was the chain shortened?

A—Well, the chain would be shortened about nine inches, I should think.

Q—You mean nine inches at each chain?

A—Yes, sir; each chain of one hundred feet.

512 Q—Did you see any notes taken by the surveyors or engineers at that time?

A—Yes, sir; some of the surveyors took notes.

Q—Did you notice Mr. Wright taking notes?

A—Yes; Mr. Wright took notes.

Q—And Mr. Smith and Mr. McCray?

A—Well, Mr. Wright took some notes that the others didn't. There was a house we passed; I think it was—

Q—(Interrupting.) What I want to ask you is this: Did you see Mr. Wright copy any notes from anybody else?

A—Yes, sir; he took notes from Mr. George Smith's
513 instrument; I saw him doing it.

Q—How did he do it?

A—Well, he wrote it down on a book; but before Mr. McCray at one point had given him the reading, he had taken up the instrument upon his shouldsrs, and started to go towards the others. Mr. McCray started to—— They had not taken the readings yet. Says he, "Never mind; I will take it from George Smith."

Cross-examination of

514 GEORGE SMITH.

By HOUGHTON. Q—After the chain, as you say, was broken how did they mend it?

A—How did they mend it?

Q—Yes, sir.

A—They mended it—what time?

Q—How did they mend it?

A—With a piece of rope.

Q—How did they do it?

A—By tying the bar to the tape.

Q—Then after it was mended the bar was still on the
515 tape?

A—Yes, sir; after they mended it.

Q—Then after the chain was mended the bar was still there, to be handled by it?

A—Yes, sir.

Q—Was not that chain mended immediately after it was broken?

A—No, sir.

Q—How long was it?

A—It was mended the next morning, before we started to work.

516 Q—There was nothing done that day about mending that or fixing it?

A—I tied a piece of string, a piece of what you call store twine, and it lasted about—it didn't last until we took the first station on it. Mr. Harold was measuring with the chain with me—Mr. Robert Harold; I believe that is his name. I was at the forward end; I was at the end that was broken, carrying that end of it.

Q—Wasn't that bar put on, or wasn't it mended at all, during the day that it was broken?

A—Not except what I had done, and that did not last until—

517 Q [Interrupting]—You mean to say you ran along and measured by that chain, and had it wound around your hand, and did not consider the distance at all, the break?

A—I told Mr. McCray about it, and he did not mend it.

Q—Did he make any estimate of the distance, or the break? Did you?

A—No, sir.

Q—How much did you say it was that it shortened that chain by winding it around your hand?

A—I suppose it would be about nine inches. Then

518 I could not put the pin in exactly as it would if the chain was perfect.

Q—Nine inches every hundred feet?

A—Yes, sir; somewhere about there.

Q—At what station did you say that break occurred?

A—It occurred when we stuck in the fifteenth pin; I stuck it in.

Q—The fifteenth pin. Where were you the next morning when you say it was permanently fixed?

A—We drove to a place where we had left off the evening before; somewhere in that vicinity.

519 Q—Where was that?

A—That must have been in the vicinity of where we quit the evening before.

Q—How far had you gone that day?

A—Had gone about—I think it was seventy stations; the 70th station, I think.

Q—The 70th station, and at that point the chain was mended, was it?

A—Yes, sir.

Q—Fixed as it was before, with the bar on it?

A—Not as it was before.

Q—The bar was put on; the ends were tied together?

520 A—Yes, sir.
Q—And from that point out it was used ?
A—Yes, sir.
Q—How many times did you see those notes copied by Mr. Wright?
A—Once only, that I could swear to.
Q—Where was that?
A—That was the second evening; I could not give you the station, because I did not—
Q [Interrupting]—The second evening. Where were you at that time?
A—I was on the line of the survey.
521 Q—Where abouts on it?
A—About four hundred feet in advance of them; they were about four hundred feet behind.
Q—Four hundred feet from where you saw this copying going on?
A—Yes, sir.
Q—You don't know what the copy was?
A—I know if he had the figures there he must have taken them from Mr. Smith, because he could not take them.
Q—You don't know what the copy was?
A—I could not give you the figures.
522 Q—Did you hear anything?
A—I heard Mr. McCray say he could take them from Geo. Smith; I was four hundred feet ahead at the time; Mr. McCray was only about two feet from me—two or three feet—when he made the remark. They were calling from one point to another. They were using two instruments at the time. They were about four hundred feet to the rear of us. These other people, Smith and Wright, were working at the time, and Mr. McCray was calling to them at the instrument.
Mr. FLOURNOY—We have no further testimony.

523 And after the testimony was closed on both sides, the case was adjourned for argument, and it was agreed that the case should be argued in San Francisco on the 20th day of June, 1881. And afterwards. and before said day fixed for said argument, to wit, on the 13th day of June, 1881, the plaintiffs served on the defendant a notice that on the 20th day of June, 1881, at San Francisco, and before the commencement of said argument, they would move the Court to re-open the case and hear further testimony on behalf of the plaintiffs, in rebuttal of the testimony

524 of the witness, George Smith, set forth on pages 127 to 131 of this ~~bill~~ petition; and served with said notice the following affidavits:

[Title of Court and Cause.]

STATE OF CALIFORNIA, }
County of Tulare, } ss.

Seth Smith, being by me first duly sworn, doth depose as follows:

525 I am the County Surveyor of the County of Tulare, in this State, and reside at Visalia, in said Tulare County, and am the same Seth Smith who was examined as a witness on the trial of the above entitled action, when I testified in regard to running a line of levels across the swamp land lying between Buena Vista and Tulare Lakes. At the time of running these levels there were with me, engaged in the work, Messrs. F. P. McCray, George W. Smith and E. T. Wright, surveyors, and Robert T. Harrold and George Smith, chainmen. The latter Smith I shall call in this affidavit "Chainman Smith," for convenience.

526 After I had finished my testimony in the case, and had been dismissed and had gone home to Visalia, Chainman Smith was, as I have been since informed, called as a witness by defendants in said case, and was asked as to the chain which was used in running the levels, and which he—Chainman Smith—carried; and (as I am told) he testified that it broke when we were about 1500 feet from the point at which we started to run the levels, and that after the break he—Chainman Smith—carried the chain by "taking a turn around his hand," whereby the chain would measure each time some nine inches less than 100 feet, instead of the full 527 100 feet which it ought to measure; and that he—Chainmain Smith—carried the chain in this way during the greater part of the first day's work, that is, for the rest of the day after said chain broke.

This testimony of Chainman Smith is in many respects untrue. It is a fact that the chain broke on the first day in which I was engaged in running said levels, and the break occurred just as we reached the first slough, or at Station 69, and that was the only time it broke. As soon as it broke Mr. F. P. McCray mended it in such a manner as not to alter its length. No measurement was made with this chain while it was

528 broken or out of order. I do not think it would be possible to use such a chain as this was in the way Chainman Smith says he used it (after it was broken) for any length of time, because, in the first place, it would cut his hand, being a thin tape or ribbon of steel, with sharp edges; and in the second place, it would probably break from the constant bending around his hand.

I was near this chain most of the time while we were running these levels. It could not have broken or been out of order, or been improperly used, without my knowing the fact.

529 SETH SMITH.

Subscribed and sworn to before me this 9th day of June, 1881.

[SEAL.] N. O. BRADLEY,
Notary Public in and for Tulare County, California.

[Title of Court and Cause.]

STATE OF CALIFORNIA, }
County of Tulare. } ss.

530 George W. Smith, being by me first duly affirmed, doth depose as follows:

I reside near Visalia, in Tulare County, California; have been the County Surveyor of said Tulare County; I am the same George W. Smith who was examined as a witness on the trial of the above entitled action, when I testified in regard to running a line of levels across the swamp land lying between Buena Vista and Tulare Lakes. At the time of running these levels, there were with me, engaged in the work, Messrs. F. P. McCray, Seth Smith and E. T. Wright, surveyors, and Robert
531 T. Harrold and George Smith, chainmen. The latter Smith I shall call in this affidavit, "Chainman Smith," for convenience. After I had finished my testimony in the case and had been dismissed, and had gone home (to Visalia), Chainman Smith was, as I have been since informed, called as a witness by defendants in said case, and was asked as to the chain which was used in running the levels, and which he—Chainman Smith—carried; and (as I am told) he testified that it broke when we were about 1500 feet from the point at which we started to run the levels, and that after the break, he—Chainman Smith—

532 carried the chain by "taking a turn around his hand," whereby the chain would measure each time, some nine inches less than 100 feet, instead of the full 100 feet which it ought to measure; and that he—Chainman Smith—carried the chain in this way during the greater part of the first day's work—that is, for the rest of the day after the said chain broke. This testimony of Chainman Smith is in many respects untrue. It is a fact that the chain broke on the first day in which I was engaged in running said levels, and the break occurred just as we reached or near the first slough, or at or near Station 69, and that was the only time it broke. As soon as,
533 or within three chains after it broke, Mr. F. P. McCray mended it in such a manner as not to alter its length. No measurement could have been made with this chain while it was broken or out of order to exceed three chains without my knowledge, and no measurement was made with any broken chain to my knowledge. I do not think it would be possible to use such a chain as this was in the way Chainman Smith says he used it (after it was broken) for any length of time; because in the first place it would cut his hand, being a thin tape or ribbon of steel, with sharp edges; and in the
534 second place it would probably break from the constant bending around his hand. I was near this chain most of the time while we were running these levels; it could not have broken or been out of order more than three chains at one time, without my knowing the fact.

GEORGE W. SMITH.

Subscribed and affirmed to before me, this 9th day of June, 1881.

[SEAL.] N. O. BRADLEY,
Notary Public in and for Tulare County, Cal.

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535 [Title of Court and Cause.]

STATE OF CALIFORNIA, }
City and County of San Francisco, } ss.

Hall McAllister, being by me first duly sworn, doth depose as follows:

I reside in said San Francisco, and am one of plaintiff's counsel in the above entitled action, and as such was engaged in the trial of it at Bakersfield. In the course of said trial and after defendants had adduced their evidence, plaintiffs called in rebuttal certain witnesses,

536 viz: F. P. McCray, Seth Smith, George W. Smith, E. T. Wright and Robert T. Harrold, to rebut certain evidence which had been put in by the defendants. The evidence of these witnesses related to the running by said F. P. McCray, Seth Smith, George W. Smith and E. T. Wright, of certain levels across the swamp land in Kern County, through which Buena Vista Slough flows; and their evidence showed that in running the levels, a certain surveyor's or engineer's chain, or steel tape line had been used for measuring the distances run over. During their examination nothing was brought out, neither on direct or cross-examination, to indicate
537 that there was anything wrong about the said chain, or tape line, or that it was in any respect, or for any reason incorrect, or likely to give erroneous measurements.

After plaintiffs had finished their aforesaid rebutting evidence, that is to say, on the second day of June, the defendants were permitted by the Court to call one George Smith, to rebut the testimony of plaintiffs' said witnesses (itself given in rebuttal); and for that purpose defendant called said George Smith, last mentioned, who had been a chainman with the party by which the levels aforesaid had been run. This man
538 testified that the chain, or tape line which he carried, while said levels were being run, broke at his end of it, when the surveying party were about 1500 feet from their starting point, and that after it broke, he, the witness—carried it by taking a turn of it around his hand, whereby the said chain, or tape line would measure each time some nine (9) inches less than one hundred feet, instead of the full one hundred feet which it ought to measure; and that he—witness—carried the said chain, or tape line this way during the greater part of the first day's work, that is for the rest
539 of the day, after said chain broke.

Plaintiff's counsel were entirely taken by surprise at this testimony and had at the time it was given no means of controverting it, nor any means of ascertaining its truth or falsity, because Messrs. Seth Smith and George W. Smith had already left Bakersfield for Tulare County. Mr. E. T. Wright had already gone home to Los Angeles, Robert T. Harrold had left for his home, (some thirty miles from Bakersfield), and F. P. McCray had left the Court Room and could not be found till after the trial was closed. Had I known then what I ascertained afterwards, viz: that the testimony of the

540 Chainman Smith would be contradicted by said F. P. McCray and Seth Smith and George W. Smith and E. T. Wright and Robert T. Harrold, I should at once have asked the Court for leave to call other witnesses to contradict him.

HALL MCALLISTER.

Subscribed and sworn to before, me this 9th day of June, 1881.

[SEAL.] J. H. BLOOD,

Notary Public in and for the City and County of San Francisco, California.

541 ———

[Title of Court and Cause.]

STATE OF CALIFORNIA, }
County of Kern } ss.

F. P. McCray, being duly sworn, doth depose as follows:

I am the same McCray who was examined as a witness on the trial of the above entitled action. In the course of the said trial I was recalled as a witness on the first of
542 June, and examined in regard to my having run a line of levels across the swamp land lying between Buena Vista and Tulare Lakes. I then testified that I had run the levels aforesaid, and that my assistants in the work were Messrs. Seth Smith, George W. Smith, and E. T. Wright, surveyors. There were also with me at the time, as chainmen, Robert T. Harrold and one George Smith, whom I call in this affidavit "Chainman Smith," to distinguish him from Mr. George Smith, the surveyor, whom I have mentioned above. Chainman Smith was called as a witness by defendants at the trial of this case, after I had been on the
543 stand for the last time, and had been dismissed and had gone away from the Court Room. He was asked as to the chain which I used in running said levels, and, as I am told, he testified that it broke 1,500 feet from the point at which I started to run the levels, and that after the break he—Chainman Smith—carried the chain by taking a turn of it around his hand, whereby the chain would measure each time some 9 inches less than 100 feet, instead of the full 100 feet it would have measure when perfect, and that he—Chainman Smith—carried the chain in this way during the greater part of the first day's work—that is, for the balance of the

544 day after said chain broke. This testimony of Chainman Smith is not strictly true. It is a fact that the chain broke on the first day in which I was engaged in running said levels, and the break occurred just as we reached the first slough, or at Station 69, and that was the only time it did break. I mended it myself, and in such a manner as not to alter its length. No measurement with this chain was made while it was broken or out of order. It would probably be impossible to use such a chain as this was (in the way Chainman Smith says he used it after it was broken) for any length of time; for, in the first place it would cut his hands, be-
545 ing a thin tape of steel with sharp edges, and in the second place it would probably break from constant bending about his hand. During all the time while I was running these levels, I was continually near the chain, and I am sure it could not have been broken or been out of order or been improperly used without my knowing the fact.

F. P. McCray.

Subscribed and sworn to before me this 9th day of June, 1881.

[SEAL] C. C. Cowgill,
546 Court Commissioner.

[Title of Court and Cause.]

State of California, } ss.
County of Los Angeles. }

E. T. Wright, being duly sworn, doth depose and say as follows:

I am the County Surveyor of the County of Los An-
547 geles, in this State, and reside at Los Angeles, and am the same E. T. Wright who was examined as a witness on the trial of the above-entitled action. In the course of the said trial I was examined as a witness on the 31st day of May, 1881, and testified that I had a short time before run a line of levels across the swamp land lying between Buena Vista and Tulare Lakes. There were with me at the time, engaged in running the levels, Messrs. F. P. McCray, Seth Smith, and George W. Smith, Surveyors, and some Chainmen, among whom was another George Smith, called in this affidavit "Chainman Smith," for the sake of precision.

548 Chainman Smith was called as a witness by defendants at the trial of this case, after I had been on the stand and had been dismissed and had gone home to Los Angeles. He was asked as to the chain which was used in running the levels, and which he—Chainman Smith—carried, and (as I am told) he testified that it broke when we were about 1500 feet from the point at which we started to run the levels, and that after the break he—Chainman Smith—carried the chain by "taking a turn of it around his hand," whereby the chain would measure each time some 9 inches less than 100 feet, instead of the full 100 feet which it ought to meas-
549 ure; and that he—Chainman Smith—carried the chain in this way during the greater part of the first day's work; that is, for the rest of the day after said chain broke.

This testimony of Chainman Smith is, in many respects, untrue. It is a fact that the chain broke on the first day in which I was engaged in running said levels, and the break occurred during the first day's work, some time before we reached Station 71, and that was the only time it broke. As soon as it broke, Mr. F. P. McCray mended it in such a manner as not to
550 alter its length. No measurement was made with this chain while it was broken or out of order. It would, I think, be impossible to use such a chain as this was in the way Chainman Smith says he used it (after it was broken) for any length of time; for, in the first place, it would cut his hand, being a thin piece of steel with sharp edges; and, in the second place, it would probably break from the constant bending about his hand.

I was near this chain most of the time while we were running these levels. It could not have broken, or been out of order, or been improperly used, without my knowing the fact.

551 E. T. WRIGHT.

Subscribed and sworn to before me, this 10th day of June, 1881,

[SEAL.] A. W. POTTS,
County Clerk, Los Angeles Co., Cal.

552 [Title of Court and Cause.]

STATE OF CALIFORNIA,
County of Kern. } ss.

Robert T. Harrold, being by me first duly sworn, doth depose as follows:

I reside in Kern County in this State, and am the same Robert T. Harrold who was examined as a witness on the trial of the above entitled action, when I testified in regard to running a line of levels across the swamp land between Buena Vista Lake and Tulare
553 Lake. In running these levels I was one of the chainmen, and one George Smith was another chainman. The surveyors of the party were Messrs. F. P. McCray, George W. Smith, Seth Smith and E. T. Wright. The George Smith whom I have described as chainman I shall call in this affidavit "Chainman Smith" for convenience.

After I had finished my testimony in the case and had been dismissed and had gone home Chainman Smith was, as I have been since informed, called as a witness by defendants in said case, and was asked as to the chain which was used in running the levels and
554 which he—Chainman Smith—carried; and, as I am told, he testified that it broke when we were about 1500 feet from the point at which we started to run the levels, and that after the break he—Chainman Smith—carried the chain by "taking a turn around his hand," whereby the chain would measure each time some nine inches less than one hundred feet, instead of the full one hundred feet which it ought to measure; and that he—Chainman Smith—carried the chain this way during the greater part of the first day's work; that is, for the rest of the day after said chain broke.

555 This testimony of Chainman Smith is in many respects untrue. It is a fact that the chain broke on the first day in which I was engaged in running said levels, and the break occurred just as we reached the first slough, or at Station 69, and that was the only time it broke. As soon as it broke Mr. F. P. McCray mended it in such a manner as not to alter its length. No measurement was made with this chain while it was broken or out of order. I do not think it would be possible to use such a chain as this was, in the way Chainman Smith says he used it (after it was broken) for any length of time; because, in the first place, it would cut

556 his hand, being a thin tape or ribbon of steel with sharp edges; and, in the second place, it would probably break from the constant bending around his hand.

I was near Chainman Smith all the time while we were running these levels, and I carried one end of the chain, the other end of which was carried by him. It was impossible for this chain to break without my knowledge, and I am sure it did not break except as I have already stated. Had it been carried by Chainman Smith in the way stated, viz: by winding it around his hand, I should have noticed the fact. I am fully sat-
557 isfied that this chain was not out of order, nor improperly used, while we were running these levels, except as it broke, as I have stated, and think it was mended at once, before it was used again.

R. T. HARROLD.

Subscribed and sworn to before me, this 13th day of June, 1881.

[SEAL.] H. A. BLODGET,
Notary Public.

All of said affidavits are endorsed:

Service of copies of within notice, order and affida-
558 vits of Seth Smith, George W. Smith, Hall McAllister, F. P. McCray, E. T. Wright and Robert T. Harrold, is hereby admitted this 15th day of June, A. D. 1881.

LOUIS T. HAGGIN,
Attorney for Defendant, the Kern River Land and Canal Company.

Read on plaintiffs' motion for leave to call additional witnesses.

B. BRUNDAGE,
Superior Judge.

559 And afterwards, at San Francisco, on said 20th day of June, 1881, said motion was heard by the Court on said affidavits, and was granted, to which ruling defendant then and there duly excepted. And thereupon, in pursuance of said ruling, the testimony of the witnesses, Seth Smith, F. P. McCray and G. W. Smith, set forth on pages 141 to 166 of this bill, was received and heard by the Court at San Francisco, and afterwards the cause was argued.

560 SETH SMITH,

being recalled by plaintiffs in rebuttal, testified as follows:

By Mr. HOUGHTON. Q—You have testified in this case formerly in regard to the line of levels which you assisted in running across the body of swamp land in Kern County, some time in the month of May?

A—Yes, sir.

Q—What did you use to measure your distances?

A—We used a steel tape or chain.

561 Q—Did that chain, while you were using it on the first day, break at all?

A—Yes, sir.

Q—At what point?

A—It broke at Station 69.

Q—What was done in regard to mending it, if anything?

A—It was mended there. Mr. McCray mended it with a strong piece of twine, at that point.

Q—Were there any other measurements taken with that chain after it broke and before it was mended?

A—No, sir.

562 Q—Did it break during the first day at any other point?

A—No, sir.

Q—Only that place?

A—That is all.

Q—I will ask you if that is the chain which you used at that time?

[Showing chain, which is afterwards marked "Plaintiff's Exhibit 100."]

A—Yes, sir.

Q—Is the end which was broken at that time in the same condition that it was after you mended it?

563 A—Yes, sir; this is the end that broke [Showing], and it is the same with the exception that it has been used a couple of days since, and has given some. When it was tied we were very particular in tying it right back to the end of the chain. In using it since that, for a couple of days, it has given.

Q—How much?

A—Probably one-eighth of an inch, since it was tied.

Q—During that survey was there any other accident to that chain, that broke it?

A—The other end of the chain, some time the second day, slipped through or pulled apart.

564 Q—What was done with that?
A—It was fixed——
Q—You say this pulled apart the second day, at the other end?
A—Yes, sir.
Q—What was done when it pulled apart?
A—It was tied.
Q—How did it pull apart?
A—The clasp underneath there straightened out here. Mr. Harrold was carrying this end of the chain and it pulled apart there, and he took the chain himself and wound it right around it.
565 Q—At the time?
A—Yes, sir.
Q—Was there any measurements made with it before it was tied together?
A—No, sir.
Q—Is it in the same condition now as it was then?
A—I think it is precisely the same.
Q—Were you near this chain when it broke the first time?
A—Yes, sir.
Q—Near the chain-man, Smith?
A—Yes, sir.
566 Q—And no measurement was taken with it until it was mended?
A—No, sir.
Q—Did you, after you returned with this chain, or after using it at any time, and after it was mended, measure the chain to see whether it was correct in length or not?
A—Yes, sir.
Q—When did you do that?
A—We measured it the next morning after getting in town, or the next day or evening.
567 Q—How did you find it?
A—I found it correct.
Q—Is the chain in the same condition now as when it was measured by you?
A—Yes, sir.
Q—What is this chain made of?
A—Steel.
Q—If this chain was broken, could it be used for any length of time for running levels, by wrapping the end of it around the hand, and running the distances in that way?
Mr. Haggin—We object to the question, as merely

568 calling for the opinion of the witness, and as utterly immaterial.

[Objection sustained and plaintiffs except.]

By Mr. HOUGHTON. Q—Could that chain be used for running—after it was broken in that way, by winding around the hand, any great number of stations, without breaking it?

Mr. HAGGIN—We make the same objection. This is merely the opinion of the witness, and not a question of fact.

Mr. HOUGHTON—He appears to be an expert upon those things.

569 The COURT—The objection is sustained.

Mr. HOUGHTON—We except.

Q—You say this broke at what station?

A—Station 69.

Q—How far did you run the first day?

A—We ran, I think, just seventy stations?

Q—That is all you ran the first day?

A—Yes, sir; just crossing the first cross-section.

Cross-examination of

570 SETH SMITH.

Mr. HAGGIN. Q—What day was that?

A—I don't recollect now. I think it was the 21st day of the month.

Q—What day of the week was it?

A—I think it was Sunday.

Q—Who was there upon the occasion of that running across there?

A—Mr. McCray, Mr. Wright, Mr. Smith, my brother, and Mr. Harrold, and the chain-carrier, Smith, and Mr. Robert Burgan and Mr. Estee. I

571 don't recollect anybody else. I don't know where Burgan lives; somewhere, I think, in Kern County. I don't know Mr. Estee's first name.

Q—Where does he live?

A—I don't know; I think he lives in Kern County.

Q—He is the man who lives in the swamp down there?

A—Yes, sir.

Q—Was there anybody else there at that time?

A—I don't recollect anybody else.

Q—Was Mr. Wible there?

A—Mr. Wible was there a portion of the day.

572 Q—What time of the day was Mr. Wible there?

A—I think Mr. Wible was there, perhaps, about 2 o'clock in the afternoon; I don't recollect exactly what time.

Q—Until you had completed your measurement?

A—That day's work.

Q—How far had you measured when Mr. Wible went there?

A—I could not tell.

Q—About?

A—I have very little idea.

573 Q—About what time did you begin this measurement?

A—We began this measurement, I think, about 12 or 1 o'clock, in my judgment. We quit a little before sundown; I presume about 7 o'clock. I don't know just the hour, though. I dont know the time it was; a little before sundown. I think it was not before 6 o'clock; some time after 6.

Q—So Mr. Wible was there with you then, for the greater portion of this measurement across there, from two to six, about four hours?

A—I presume he was there most of the time. I

574 don't think we had got half way across when he came to us. I won't be positive about it. We had a wagon with us. Mr. Burgan was driving one wagon, and I think Mr. Estee was driving the other. There were two wagons. Those wagons were usually behind us; but sometimes they would drive up, and go ahead of us. One of them was generally ahead, and one behind. I think Mr. Burgan was generally behind. I think Mr. Estee drove the one that was ahead. In going across there one was not always ahead and the other behind. Sometimes both wagons were ahead. I think one of them was ahead of us all of the time; but I am not

575 sure; it might not have been all of the time. I didn't carry the chain at all.

Q—Who did carry this chain?

A—Mr. Smith and Mr. Harrold.

Q—Which end did Mr. Harrold carry?

A—Mr. Harrold carried the hind end of the chain.

Q—What Smith?

A—I mean Geo. Smith the one who testified for the defendants in this case. He carried the front end of the chain. But one chain was carried across there. This is the only one that was used. Smith and Harrold were the only chainmen on that piece of work until the last

576 afternoon; they were the only ones the first day. I believe Mr. McCray carried the front end of the chain the last part of the work in the evening. Mr. Smith who was carrying it, was sent to camp and was getting supper. I can't say just how many stations Mr. McCray carried the chain, I think it was about I should judge from one thousand to fifteen hundred feet, perhaps more—ten or fifteen stations. And that was the last portion of the second day's work. Except at that time, nobody carried the chain but Mr. Harrold and Smith.

Q—You carried the rod. At what distance did you
577 hold that rod for the sights to be taken?

A—Every hundred feet.

Q—How did you know it was one hundred feet?

A—By measurement.

Q—Were any pegs put in?

A—Yes, sir.

Q—Who put them in?

A—The iron pins used in chaining, were put in by the same George Smith, who was a witness for defendants. He carried the pins.

Q—How many stations would be run off, before he would stop to gather up his pins again.

578 A—Ten. Every ten stations he would stop and gather up the pins.

Q—Was it a fact that as Harrold came, he picked up the pins at the rear end of the measurements?

A—Yes, sir. I didn't follow Harrold. We always set the pins to set out levels. We always set our rod before the pins were pulled up.

Q—Then you were with Mr. Harrold all the time?

A—No, sir. Often we would be with the head chainman; often I would just set my level and he would stick his pin. I can't tell how often that occurred; should
579 think half of the time. I can't tell you what proportion of the time I was ahead, and what proportion of the time behind. I could give you an idea. It was just according to the way they chained. Sometimes it would take longer to get a reading of the rod than others. Sometimes Harrold would wait until I would get the reading of the rod. Then I would be ready when the pin was stuck.

Q—Sometimes he would go ahead of you?

A—No, sir.

Q—Then what do you mean by saying sometimes he would wait?

580 A—That he would wait for me to come up before he pulled his pin; at times he was ahead of me.

Q—Which is the end of the chain which you broke first, on the first day?

A—This one [showing].

Q—Did you see it break?

A—No, sir; I did not see it break.

Q—Then you don't know where it broke?

A—Yes, sir.

Q—How do you know?

A—I know it was not broken at the 68th station.

Q—How do you know that?

581 A—I know it because I saw it.

Q—Who mended this chain?

A—Mr. McCray.

Q—Where did he get this string?

A—He got it from one of the wagons, I think; which one I cannot tell you. The wagons were both standing there then, just ahead of us, both of them standing there together. I don't think I saw the string taken from the wagon; I recollect the string being called for and being brought; I think that one of the men brought in the string. I cannot say positively whether he took
582 the string from the wagon himself or not; but I think not.

Q—Did you examine this at the 68th station?

A—I saw it; I didn't take it in my hand and examine it. I was there and saw him stick the pin; I saw Mr. Smith with the chain clasp in his hand.

Q—How was he holding that—can you show me?

A—Yes, sir [showing]; in that shape, with the clasp in his fingers; his hand was not entirely closed; in carrying it with the pins in the other hand, his hand would be partially closed; in sticking the pin the hand was always open.

583 Q—How did you happen to notice that?

A—I noticed it at every station; it broke at the 69th station before the pin was stuck.

Q—What was done after it was broken—didn't he stick the pin?

A—No, sir; it was fixed then, before the pin was stuck.

Q—When did you first hear of this testimony of George Smith?

A—I can't tell you the day of the month.

Q—About when?

A—I think it was the second day after I got home,

584 in Visalia, I first heard it from Mr. McCray; I heard of it next from Mr. Bottsford; I heard of it next from Mr. Thornton, Dr. Thornton, at Visalia.

Q—How did you happen to make this affidavit?

A—The affidavit was sent to me by Mr. Houghton. It was already prepared and drawn up.

Q—Did you make any alterations in that affidavit?

A—I did not.

Q—Just signed it as it was written out?

A—Yes, sir.

Q—Did you notice the peculiar manner in which George Smith held that chain at the 15th station?

585 A—I noticed no peculiar manner in which it was held.

Q—Then the particular manner?

A—I noticed particularly in the way I illustrated it was carried.

Q—Did you notice it as much at the 15th as at the 68th station?

A—I think so. I noticed it particularly all the way because we were all cautioned to be very particular about it.

Q—So that you saw, then, this chain in Mr. Smith's hand at every station, did you?

586 A—I think I did.

Q—How far can you see?

A—I can see some things a great ways.

Q—How far could you see any of that chain in his hand?

A—I could see that chain in his hand a hundred feet.

Q—And so you looked every hundred feet to see that that chain was all right, did you, in his hand?

A—I noticed it all of the time, every station.

Q—Whether you were with him or not?

587 A—Yes, sir.

Q—You were cautioned to do that thing particularly?

A—We were.

Q—Did you watch Mr. Harrold's end of the chain as closely as you did Mr. Smith's?

A—I think so.

588 Re-direct examination of

SETH SMITH.

By Mr. HOUGHTON. Q—Was Mr. Wible one of your party in making that survey?

A—No, sir.

Q—After he joined you did he remain with you all the time?

A—No, sir.

Q—He was going away and coming back at times?

A—Yes, sir.

589

RE-CROSS-EXAMINATION.

By Mr. HAGGIN. Q—Did you see Mr. McCray himself tie that particular piece?

A—I did.

Q—You think you would recognize that identical string again?

A—It was the same kind of a string.

Q—This has not been in your possession all of the time?

590 A—No, sir.

Q—Had you seen this before you came here after leaving Visalia?

A—No, sir.

Q—Between that time and the present you have not seen that chain?

A—No, sir.

F. P. MCCRAY,

Being recalled for plaintiffs in rebuttal, testified as follows:

591 By Mr. HOUGHTON. Q—Is that [showing Exhibit 100 [the chain that was used in running the elevation which you testified to across Buena Vista Swamp Land?

A—Yes, sir; that is the same chain.

Q—Is that in the same condition now that it was when you returned from making that survey?

A—Yes, sir; no change in it at all.

Q—When was that end of that that was tied with a large string, fixed in that condition, and where?

A—It was fixed at Station 69, between Station 68 and 69.

592 Q—What occasioned your fixing it up in that manner at that place?

A—It was pulled apart at that point.

Q—Who fixed it or tied it up?

A—I did.

Q—Where did it pull apart?

A—It pulled apart at the end.

Q—At what station did you say?

A—It pulled apart at Station 69.

Q—Was that the station where it pulled apart?

A—Yes, sir; at Station 69.

Q—Did that chain break or pull apart at any other
593 time during the first day you were running levels, except at that point?

A—No, sir.

Q—You were watching it all of the time?

A—I was watching it all of the time.

Q—At which end of the chain were you?

A—At Smith's end; and it broke at no other point except that station. That chain did not break at any other station except the 69th.

Q—How long after that was broken or pulled apart at that station was it before you fixed it?

A—It was fixed immediately, at once, at this place.

594 Q—Did that chain pull apart or break at any other time during that whole survey across there?

A—Yes, sir; it pulled apart during the survey.

Q—When?

A—The next day.

Q—Which end of it?

A—The hind end, that Harrold had.

Q—When was that fixed?

A—It was fixed at the time; Mr. Harrold fixed it himself.

Q—Was it used from the time it was pulled apart,
595 until it was fixed by Mr. Harrold, at all?

A—No, sir; he fixed it right at the time. He could not hold it.

Q—Did you, when you returned from that survey, measure the length of that chain, to see whether it was correct or not?

A—Yes, sir; I found it all right.

Q—Is it in the same condition now that it was when you measured it?

A—Yes, sir; no change.

Q—Are the pieces of twine the same as when you used it?

596 A—Just the same; no change.

Q—How far did you run that line the first day?

A—We ran to Station 70, as I remember it. We ran to Station 70 that day; and that is as far as we ran on the first day.

Cross-examination of

F. P. McCray.

By Mr. Flournoy. Q—What position did you have on the line of that survey? What were you doing?

597 A—I was carrying the rod, the level rod, on the line of levels that we ran across there; two lines of levels were run across there, with two levels and two rods.

Q—Who was taking the readings of the north line?

A—I was, along at the front end of the chain. I was taking the readings on the north line. Seth Smith was taking the readings on the south line, the witness who has just testified. The chain was used on the north line, when it was called for, where the tules or vegetation was such as to make it come to that point or side of the road-way.

598 Q—Did you change the chain-bearers from one line to the other?

A—No, sir.

Q—Which line did they run on all through?

A—Sometimes the ground was clear, and in cases of that kind my recollection is that they took the middle of the track there. But at the turning points they were always in the middle. It was placed in the middle of the road-way. There were two separate levels run, and run as nearly parallel as possible with each other.

Q—On which one of these lines of levels was the chain used, the north or the south? On which was

599 the chain actually used?

A—It was used at times upon the north side, and at other times, where it was clear, it would be in the middle of the roadway; and the rod was set at the end of the chain, in the middle of the roadway. The chain was carried on the north line, and that was the line that I was reading the calls from on the rod. Mr. Smith was carrying the other rod. I was always with Mr. George Smith, throughout the whole line, right along with him. I carried the rod and read it, and called off the readings to Mr. Wright.

Q—You kept notes too, didn't you?

600 A—Yes, sir; I kept notes of the whole survey; kept notes of the levels.

Q—Did you make any note of the breaking of the chain?

A—No, sir.

Q—Did you notice the chain particularly?

A—All the time; yes, sir; at every station.

Q—Why was that?

A—Because it was my habit to do so.

Q—To see if it broke?

A—To see that it was done right.

Q—Mr. Smith and you were both noticing that par-
601 ticularly?

A—We were, right along. I was at the front end of the chain, noticing the whole chain. Seth Smith was right along with me. He was at one end of the chain and I was at the other. Sometimes we would both be at one end of the chain.

Q—He was reading the rod at one end and you at the other?

A—I tell you that we set the turning points at the middle of the road, from which we both took our readings; then we went together; and that could not be moved much. We had to remain there until the level-
602 lers went ahead.

Q—Who took the turning points?

A—Both of us.

Q—How?

A—By setting the rod up on the point and getting the elevation, and getting the level. Mr. Smith and myself set those rods. Frst one would set the rod on the turning point and then the other. I kept ahead all of the time, and I kept right along with Mr. George Smith, and Seth Smith kept behind, at the other end of the chain, all of the time. That was our habit.

603 Q—How did Seth Smith learn where the turning point was, if he was behind you all of the time?

A—The turning point is something that they have to know about. The turning point is the place where you have to stop and take the reading, in front of the level; and then when you obtain the reading on that point of the level, the level is taken up and carried ahead to some convenient point, and then the reading is taken to this point, just the same as the last point was taken; and that was our turning point. We were not both holding our rods at the same time on the turning point; we could not do that. He used the

604 same turning point that I did. The turning point was a peg in the ground; and I would hold my rod to the top of it, and when I got through then he would hold his rod to the top of it.

Q—Then you were running practically one line instead of two?

A—We were running a line across there?

Q—One or two lines?

A—There would be—I presume you would call it two lines; or you might call it one line. Seth Smith carried the rod on the south line. I carried my rod at the front end of the chain and Mr. Smith carried his
605 rod at the hind end of the chain. We professed to run two levels across there. Two levels were run across there, one as a check upon the other. They checked closely. Mr. Wright ran one line of levels, and the two Mr. Smiths ran the other line of levels. A line of levels cannot be run without a rod.

Q—He had a rod on the rear end and you on the front end?

A—He was at the rear end of the chain while I was on the front end of the chain.

Q—Was he on the same line with you?

A—He could answer that better than myself.

606 Q—Couldn't you see him one hundred feet off?

A—Certainly.

Q—Did he put his rod on the same line you had put yours on?

A—He put it right along on the same line; he would be right in the roadway—

Q—[interrupting] Who was at the front end of the south line—you were at the front end of the south line?

A—The chain was continued. One chain was used. I set my rod on the north end of it.

607 Q—But there was another level at the south end of it, and the testimony previously was that it was about three feet running parallel?

A—On the north line when he held the front end, then the hind rodman would come up and set his rod opposite, or by the hind point. He would set it where the ground was level at that point.

Q—Would he set it precisely where your rod had been?

A—I presume he did. I would set it where it would be level.

Q—You don't know about that?

608 A—No, sir. Smith called the readings from one line, and I from the other, at each reading that I took, and they were put down on both lines.

Q—You would call out such a reading and one man would take it down, and then another would take it down. Instead of their being two lines, there were only two memoranda made?

A—There were two lines of levels run across there.

Q—You kept your eye on this chain all the time?

A—Yes, sir.

Q—What happened on the 1500 foot station?

A—Nothing.

609 Q—Who was there at the 1500 foot station?

A—The whole party was along there, all together.

Q—Who were they?

A—First the surveying party, composed of Mr. George Smith, Mr. Wright, Seth Smith and myself and Mr. Harrold carried the hind end of the chain and George Smith carried the other end of the chain.

Q—Who else was there?

A—Then we had two wagons; Mr. Estee drove one and Mr. Burgan the other. One wagon was behind and one before. I don't remember who drove the front wagon. There was nobody in front of our wagon.

610 I don't know that the wagons were with us all of the time. But as a rule they were with us.

Q—Did it make a road in the tules?

A—No, sir.

Q—Mash down the tules?

A—The tules were mashed down on the line, but not by that wagon.

Q—How were they mashed down?

A—By some one else, by other means. I don't know.

Q—How do you know?

611 A—Simply because they were.

Q—How do you know it?

A—I could see them. The wagons didn't mash them down. I was not ahead of the wagons.

Q—Then how do you know that the wagons didn't do it?

A—Simply because it was already mashed down.

Q—How do you know that?

A—Because I could see it.

Q—All of the way? How could you see it?

A—With my eyes. We were going on a straight line; making a straight line.

612 Q—How could you see ahead? You were right along behind the wagon?

A—I had been over the line before.

Q—How do you know you had?

A—I know it like I know many other things. I had rode across the line before.

Q—Is that what you mean by riding over it, riding across it? Do you mean riding or driving across it?

A—I might have done both.

Q—Which did you do?

A—I don't remember.

Q—You don't remember whether you rode or drove;
613 whether you were on horseback or in a wagon?

A—I was in a wagon. I don't remember how many times I have crossed it; more than once. I had crossed the swamp on that line or along that line in a wagon more than once. I don't remember whether more than twice. I have been along the line several times, but the number of times I don't remember.

Q—I mean before you made the survey and after you say the tules were broken down. Between those two times how often did you go along that line with the wagon?

A—I don't remember. I don't remember whether
614 more than twice. I know I went several times, but I don't remember how many times I did go across there. My business carried me across there. I don't remember what the business was. I had some business across. I had different business. It may be I wanted to find some sloughs across there.

Q—Could you not find them on the first trip?

A—May be I wanted to find them at other points. I don't know that that was the only business I was on.

Q—The road was pretty well worn down, then, when you ran the survey?

615 A—Yes, sir.

Q—And you made no note of this chain breaking?

A—No, sir. It broke between Stations 68 and 69.

Q—Did you see it when it broke?

A—When it broke it was this way: I saw it when it was broke—

Q—[Interrupting.] Did you see it when it did break?

A—I don't know that I was looking at it when it broke.

Q—How long after it broke did you see it?

A—Probably half a minute.

616 Q—Will you be positive about that?
A—Yes, sir.
Q—You didn't see it break?
A—No, sir.
Q—How do you know it broke in that half minute?
A—Because Smith called out that it was broken. He was at the front end of the chain and I was at the hind end, at the turning point.
Q—Then you were at the hind end occasionally?
A—I was at the front end, probably, when the reading was taken. But at that point I was at the hind end, because it was at the turning point, and I was waiting
617 for the levelers to come up. I was keeping my eye on the chain all of the time it was being used.
Q—Where was Seth Smith then?
A—He was with me. We were both at the hind end at that time, between Stations 68 and 69. The 68th Station was where the turning point was, but the 69th Station was where this was broken. We were at the turning point. After the survey was commenced there was no intermission; we went right along, Mr. Smith carried the chain in his hand all of the time. There was no stoppage for anything unusual. We stopped for the levellers to go ahead when we were at the turn-
618 ing points. There was no stop for anything out of the way. That occurred about every five hundred feet. We stopped for no other purpose. We had a turning point about every five hundred feet. The instrument would be two hundred and fifty or three hundred feet from us at the turning point. The reading was taken every hundred feet. We were sometimes two or three hundred feet at the turning point from the instrument. The last reading was taken at that point. And the instrument has nothing to do with it. We do not locate the instrument in levels. After the reading is taken
619 from the turning point, then the instrument is carried ahead upon the line and again set at some convenient point; it is immaterial what point, providing you don't get out of your line of sight or vision. It is immaterial as to the distance, providing you do not exceed a certain distance. The instrument would go ahead two hundred feet or three hundred feet; somewhere in the neighborhood of that. And the rod would then be set upon the same point, on that particular turning point, and the reading would be taken from that. I kept with Mr. Smith all of the time. We were together at the turning points. Whenever the turning point was

620 established, then everything stopped right there; we would stop there.

Q—How did the chain break at the 69th Station when you were standing at the turning point of 68?

A—The wagon was standing on the bank of the slough near that point, and he had probably gone ahead to get water or something of that sort, and he had this end of the chain.

Q—How did he break it at the 69th Station?

A—He broke it by pulling on it.

Q—What was he doing at the 69th Station?

A—He might have been making preparations to
621 stake it.

Q—Did you say that everything had stopped?

A—That was the rule; at the turning point everything was stopped.

Q—Suppose he had made preparations and had staked it, would you have been there to have seen it?

A—I would have seen it. I might not have been with him; the chances are that I would not at that particular time?

Q—Then you mean to say that he would measure and put his rod down at one hundred feet, when you would
622 be back making the turning point?

A—No, sir; I don't mean to say that. At Station 69 he did not set anything. The wagon was standing there, and he went ahead, I think, to get a drink of water.

Q—Did he stick his peg at any station of one hundred feet beyond where you were fixing the turning point at any time?

A—I was right with him all of the time. That was my rule, and I am certain that he did not.

Q—Do you mean that you were within one hundred feet of him all of the time?

623 A—No, sir; I was right with him all of the time.

Q—And he never did set a pin down without your being right at it?

A—No, sir; I don't know that he did.

Q—Then, if he had set down a pin at the 69th Station, it would have been the first time that it had ever occurred on the whole survey, would it?

A—I cannot say as to that.

Q—What is your opinion about it?

A—I think it would have been the first time.

Q—Did you tell all who were with you at the 1500-feet station?

624 A—Yes, sir.

Q—Name them them over again, every person who was there.

A—Mr. Wright, George Smith, Seth Smith and myself, and Mr. Harrold and this chain-man, Mr. Smith, and Mr. Burgan and Mr. Estee. We were all together when we started from the initial point at Harrold's house; the same party. I don't know of any one else being with us.

Q—Was there anybody else of you as you went across on that day's work?

A—There were persons with us; yes, sir; who came
625 to us.

Q—Who?

A—I think Mr. Wible came to us that afternoon sometime. We commenced the survey in the afternoon about 1 o'clock, as well as I remember. Mr. Wible joined us sometime in the afternoon; about the middle, perhaps; about 3 or 4 o'clock. I don't know of any one else joining us that day. I don't remember what direction Mr. Wible came from when he joined us. He came in a buggy. I don't remember at what station he joined us. I know he was not with us when we started. That chain broke once and I mended it.

626 Q—That evening?

A—Yes, sir; that evening.

Q—How many measurements did you take after mending it that evening?

A—We measured to Station 70, one or two hundred feet; maybe three hundred feet further. We finished right there at that place; we discontinued our lines at this point, Station 70 or 71. It was Station 70, as well as I remember. That would be one hundred feet beyond where the chain broke, at Station 69. My memory is, we discontinued at Station 70. I don't know
627 whether my notes show or not. I am positive we could not have gone very far after the chain broke that day, and I am positive that the chain was mended immediately, before we measured any farther. The string was taken from the wagon. I don't remember whether it was from the front wagon or not. Both wagons drove up there to that point at that time. I don't remember whether they were both east or west of the station at that time. It was Mr. Estee's wagon that the string was taken from. I don't remember who gave it to me. I first learned what George Smith has testified to in this case on the day the trial was ended,

628 about noon. I started for the Court-house when I heard it. I reached the Court-house just as they were coming down stairs. I met Mr. Gardner on the stairway at the foot of the Court-house, and met Mr. Houghton afterwards at the Court-house, I think, or on the steps of the Court-house. I went to the Court-house with Mr. Cowgill, because Mr. Cowgill had told me what this man Smith had testified to. That is all he told me.

Q—Did he tell you you were wanted at the Court-house?

A—Yes, sir; he said they wanted me at the Court-
629 house. I don't know that he said who wanted me. I understood him that the plaintiffs wanted me at the Court-house; it was my understanding that they wanted me there to testify, and I went right on up, as soon as he told me. When I got there, I found the Court had adjourned. I met the counsel for the plaintiffs right there in front of the Court-house. I don't think there was any conversation there at that time in reference to George Smith's testimony. Everybody was going down town, and I turned with them. I understood the Court had adjourned.

630 Q—Had you informed anybody as to whether Smith's testimony was true or false?

A—I certainly had not. I spoke to Mr. Cowgill about going up.

Q—Did you speak to any one else about it that day at the Court-house, or after you left it?

A—I don't remember about that.

Q—Was Mr. Cowgill the only one you had a conversation with about the subject?

A—We were talking about the matter going to the Court-house?

Q—Did you have any other conversation? Was Mr.
631 Cowgill one of the attorneys for the plaintiffs?

A—I don't remember. I went to Visalia. I went there two or three weeks ago; it was the night after the Court adjourned at Bakersfield; I went to see Mr. Smith about some business matters. A part of it related to the testimony of George Smith; I didn't go there on that account altogether.

Q—Did you go there to interview him upon the subject of George Smith's testimony?

A—Not altogether; partly. I went to get some information from Visalia relative to certain locations, maps and matters of that kind, and partly in reference

632 to this testimony of George Smith. I had an interview with the Smiths, and told them what George Smith had testified to. I took a memorandum of his testimony. I got it from the Court Reporter--from Mr. Belden, I think. I got it on my own account. Nobody sent me to Visalia. I went there on my own account, paid my own expenses, which have not been refunded to me. I went up on my own account, and in connection with this other. I have not charged my expenses for going up there to any one. I don't know that any one suggested to me that I had better go there. I went on my own account.

633 Q—Without suggestions from any one?

A—I don't know that I did; I dont know that the matter was suggested to me.

Q--What motive had you in consulting with them upon the subject of George Smith's testimony?

A—I went up there to get other matters—

Q—[Interrupting]—You went partly up there on that account?

A--Yes, sir.

Q—What was your motive for that?

A—To see what they remembered about the matter, just to know what they remembered about it?

634 Q--With reference to using it in any way?

A—I didn't know how the matter would come up—just for my own satisfaction. I wanted to know how the matter was, and to know that my memory of it was all right.

Q—You were not certain about it yourself?

A—Yes, sir; I was certain about it.

Q—You wanted to know whether your memory was all right about it. What other business did you go there for?

A—I went to get some maps, maps of the Tulare

635 Lake and through that country. I wanted to know and see the map of the country,

Q—Did you interview the Messrs. Smith upon that subject?

A—Yes, sir. Nothing followed that interview.

Q—Did you report to anybody.

A—Yes, sir; to Mr. Houghton.

Q--At whose request?

A--I don't remember about that; I don't remember who requested it.

Q--Did you take from the Smith's a memorandum of their testimony, what they knew about it?

636 A—No, sir. I din't see Mr. Wright. That was all the connection I had with it after that. I didn't bring down any memorandum of what they would testify to. I didn't go to Visalia but once. I have not seen Mr. Wright since he was in Bakersfield, nor did I see the Messrs. Smith after my trip to Visalia until I met them coming down here. I have had no communications with them since by correspondence or otherwise, that is since I was at Visalia. I made an affidavit in this case at Bakersfield, before Mr. Cowgill. I don't remember the date exactly. Mr. W. B. Houghton was present. The affidavit was not prepared and written out in my
637 presence; It was written out before I went there. It was not altered afterwards. I signed it and swore to it. It was not written under my direction.

Re-direct examination of

F. P. McCray.

By Mr. Houghton. Q—I understand you to say that at the place where you took those levels there was a roadway across there?

638 A—Yes, sir. The tules were broken down flat to the ground, through the entire line to the width of a wagon. That was probably done by dragging something after a wagon.

Q—Were you at Station 68, where the starting point was made when the stake was set at that point?

A—Yes, sir.

Q—Was the stake put right at that point?

A—Yes, sir.

Q—When Mr. Smith called at Station 69 that the chain was broken, what did you do?

A—Fixed it.

639 Q—Had he set the stake when you got there?

A—No, sir.

Q—Did he set it afterwards at that point?

A—After the chain was fixed—immediately after the chain was fixed, we continued on our way.

Q—You say you went to Visalia to see the Smiths. Did you report to me what they would testify to, and what affidavit they would make in this matter.

A—Yes, sir; I wrote to you their memory of the matter.

Q—Did you ever state to me after the adjournment of the Court in Bakersfield the facts in connection with

640 the breaking of that chain, and what occurred afterwards?

A—Yes, sir.

By the COURT. [Referring to the chain.] Q—How did you fix this?

A—I tied it in this way. It has been used two days since I tied it, and the string has probably given a very little from what it was at the time.

Q—Has it been retied since then?

A—No, sir. That was tied at the time we were running those levels across this swamp, at Station 69.

641

GEORGE W. SMITH,

Being recalled as a witness for plaintiffs in rebuttal, testified as follows:

By Mr. HOUGHTON. Q—Look at this chain. [Showing chain, afterwards marked "Exhibit 100."] Is this the chain or tape that you used when you ran the line of levels across Buena Vista Slough lands in May or June?

642 A—Yes, sir; I believe it to be such; it looks exactly like it.

Q—Is that in the same condition it was in running those levels?

A—Yes, sir.

Q—Do you remember the chain breaking at any time during the first day you were running levels there?

A—The first day, about quitting time I came up to the instrument where the boys were at the turning point at Station 68. They were fixing the chain, and I asked them what was the matter, and they said the chain was broken, and Mr. McCray was fixing it. That was Sunday.

643 Q—What was the condition of the chain that day before the time you reached that station, 68 or 69, running that line?

A—It was in good condition. I examined it before we started in.

Q—Did you watch the chain as you went along every station to see that it was in good condition?

A—Every time I passed it or it passed me.

Q—How often would it pass you?

A—It was sometimes about three hundred feet ahead of me. I would pass it and it would pass me.

644 Q—What was the condition of that chain up to the 68th Station?

A—Good.

Q—Was it broken at any time before it reached that station?

A—No, sir; not to my knowledge. It could not have been for any length of time without my knowing it; I think it could not have been broken at all. Of course, I was sometimes three hundred feet from the chain, but not more than that. It could not have broken to affect anything and be fixed between my coming up and the time it was broken. I would be with the chain
645 every three hundred feet, and must have known of it if it was broken within that distance.

Q—Do you remember whether that chain was broken or pulled apart after that during the survey at all?

A—Yes, sir; Mr. Harrold's end slipped off. I asked the question, what happened; and I think Mr. Harrold was fixing it. It was fixed immediately.

Q—Is that chain in the condition now that it was when it was fixed?

A—Yes, sir.

Q—Did you measure that chain after you had returned from that survey to see whether it was correct
646 or not?

A—Yes, sir, and I found it correct.

Cross-examination of

G. W. Smith.

By Mr. Haggin. Q—How long is that chain?

A—One hundred feet.

Q—How did you measure it?

A—I measured it with a leveling-rod. It slipped off
647 and the catch came out; it was not broken at all. I don't remember what day of the month that was.

Q—About what day of the month? You were there only two days, were you?

A—I was there twice; one time I was there a week after that on the same line. It was somewhere about the first of June. I wouldn't say it was that day; but it was Sunday, about that date. I think it broke about the first of June. That was the only survey that I made in connection with Mr. Smith and Mr. McCray. It was not the last time that I went there; it was the first time; it was the first day that I was there on the swamp.

Q—Who was carrying this chain across there, across the swamp, on that first day?

A—A man named Smith, and Harrold.

Q—How did they carry it? which was ahead?

A—Mr. Smith; and Mr. Harrold was at the rear end.

Q—They carried it right through the swamp?

A—Yes, sir; they stopped at every turn, until the instrument was ready for them to proceed.

Q—Then they went right on as soon as the instrument was ready, and straight across the swamp?

A—Yes, sir. At the turning points, the time they would stop would be sometimes more and sometimes less; it depended on our option. The instrument governed that thing; when we got ready they moved. It might have been five or ten, or may be sometimes fifteen minutes. Just a few minutes; sometimes possibly fifteen. We might have stopped to get a drink of water at the wagon, or something or other.

Q—You say that, in running those lines, the chain passed you at each turn, and you noticed the condition of the chain?

A—Yes, sir; and the chain-man.

Q—Were you required to notice the condition of the chain-man?

A—Yes, sir.

Q—What observation did you make of the chain—take it into your hand and examine it?

A—No, sir; I passed right by it and saw it when it was lying straight; and when they passed me, I saw them with the chain in their hands.

Q—Did you look at their hands?

A—Yes, sir; I was very particular to see how they carried the chain; particular how they carried and stuck their pins, and always watched them in that regard, and particularly that man Smith. I was to observe how they put their pins.

Q—Where were you when they were placing their pins?

A—They passed after me, sticking their pins always when I had my instrument set. Sometimes they would be right beside me; one pin would be stuck close to me. George Smith, in sticking pins, would be all of the way from nothing to three hundred feet from me.

Q—Would not get beyond three hundred feet?

A—He did not that day. He might have got a few feet more than that, but not much.

652 Q—Were you watching him all of that time?

A—When I passed him. I could not watch him particularly when he was farther off.

Q—Has this chain any marks upon it?

A—Yes, sir; those marks soldered on there represent feet. Every solder mark is a foot. The brass marks are ten-foot marks, and fifty and so on. The brass marks represent tens, one, two and three tens, and so forth. It has a solder mark at every foot, and at every ten feet one of these brass marks. There is no difference between the ends.

Q—Do you know which end of this chain Harrold
653 had in going across the first day?

A—I know by the way the thing is fixed. He was carrying the back end. I know by that being fixed there with that kind of twine. I saw Mr. McCray fixing it there. Up to that time I did not know which particular end of this chain Harrold carried. I saw Mr. McCray fix this at Station 69, when we came up on the turn.

Q—What time of the day was that?

A—Nearly night. I don't know where he got that string. There was a ball of twine of that kind in the
654 wagon that he had along.

Q—How do you know that that is the same one you saw there?

A—To every appearance. It would be a very close imitation if it was not.

Q—Suppose some one had cut that piece of string off and tied it on again?

A—It is barely possible.

Q—You could not say whether he did or not?

A—I don't think he did.

Q—Can you tell whether he did or not? Is there anything on there to identify that, upon the particular
655 end that he mended at that time?

A—Only the appearance of it. I know that it looks just like it did when it was put on there. It was not fixed after that until we got home and measured it; and that has identically the appearance of the same thing.

Q—It was not fixed after that until you got home and measured it?

A—No, sir.

Q—And how did you fix it then?

A—It was not fixed at all that I know of.

Q—What do you mean by saying that it was not fixed after that?

656 A—I didn't say it was fixed after that. I say it was not fixed until that time. I don't think it was fixed. I last saw this chain, before coming here, at Bakersfield; I saw it yesterday evening.

Q—Then you have not seen it since the adjournment of the Court at Bakersfield?

A—No, sir.

Q—Who was present on the ground at the time this chain broke on the first day?

A—It broke before I came up; they were fixing it when I came up. Mr. Wright of Los Angeles was present, Mr. McCray, my brother and myself and the
657 two chain men, Smith and Harrold.

Q—Anybody else?

A—Not immediately. There were two teams along there. I don't remember where they were. I didn't pay much attention to them only when I wanted some water. They were somewhere in the neighborhood, I think. They carried the water in the wagon. Mr. Burgan was driving one team and I think the other was driven by a man called Estee. I don't think anybody else was in those wagons.

Q—Anybody else present at that time when they were passing the chain but those whom you have
658 named?

A—I think not. Mr. Wible was on the ground, but I think he had left before that. That is my impression. He left just before night, and I think before the chain broke, but I am not positive. He was ahead of us when we quit.

Q—He was not there when the chain break was mended?

A—I am not positive. He joined us along in the evening after we had got to work. He came there in his buggy. I don't think any one was with him. I
659 I don't remember whether he got out of his buggy at all. I think he did. I am not positive whether he did or not. The wagons were not with me. I was running the instrument and didn't pay much attention to the wagons. I don't remember whether I saw him out of his buggy at all or not, but I have an impression that he was out. I don't think any one was with him in his buggy when he came there. I don't remember anybody being with him. I don't think anybody came with him. There might have been and I not know it. If he got out I probably saw him and thought nothing of it. I wouldn't remember it whether he did or not.

660 I could not tell you whether he was out for any length of time, because that was not a part of my business. I wouldn't have noticed it. He might or might not have been. He was not driving along with me personally; he was in the crowd sometimes, along with the company. By the crowd I mean we were all in sight of each other, stretched along. There was no party present there to make pegs or cut pegs for us. We used iron pins; no wooden pegs at all. It is my impression that when they were mending this chain Mr. Wible had gone on, but I am not positive.

Q—Were you not all gathered around when this
661 chain was being mended?

A—No, sir; I went and attended to my instrument. I saw him mending it. I saw it after it was done that evening and the next morning. I didn't see the mending done at that time, the whole of it. I saw him mending it. I was twenty or thirty feet, perhaps, from him when he was mending it. I saw he had a string like that fixing it.

Q—How did you happen to notice that it was a string like that?

A—Because I was thinking about the strength to the string, and noticed how they were doing it, and I knew
662 he had a ball of twine of that kind in the wagon.

Re-direct examination of

G. W. Smith.

By Mr. Houghton. Q—You say that Mr. Wible was there but you don't know how long he remained?

A—Yes, sir. My impression is that he went ahead of us and was ahead of us when we stopped work.
663 One of our party might have gone home with him that night. He was ahead of the wagon I was in.

Q—You don't remember as a fact whether they did or not?

A—No, sir; I am not positive that he was there when some of them quit, because I paid no attention to Mr. Wible or the wagon, so I am not positive about it.

Mr. Houghton—Now we offer in evidence this chain marked "Plaintiffs' Exhibit 100," and it is marked "Plaintiffs' Exhibit 100."

664 The foregoing was all the testimony given in this case; and the case being closed, thereupon the cause was argued and submitted to the Court for decision; and afterwards the Court filed its written findings and decision on the 3d day of November, 1881, ordering judgment in favor of the defendant, the Kern River Land and Canal Company, which findings and decision are in the words and figures following :

665 *In the Superior Court of the County of Kern, State of California.*

CHARLES LUX et al.,
Plaintiffs
vs.
JAMES B. HAGGIN et al.,
Defendants.

666 This cause coming on for trial before the Court, and the parties appearing by their attorneys, and having waived a jury, and the Court having duly heard and considered the evidence, oral and documentary, offered by the respective parties, and having duly deliberated thereon, finds the following facts, to-wit:

1.

667 That the plaintiffs are the owners of the lands in Schedule "M," attached to their amended complaint, described and acquired their title thereto as and at the times hereinafter set forth:

That on the 18th day of January, 1876, there was granted to the plaintiffs, Miller, Lux and Crocker, by letters patent, by the State of California, the following described portion of said lands, viz:

All of Sections Five (5), Ten (10), Eleven (11), Twelve (12), Thirteen (13, Fourteen (14), Twenty-four (24), Twenty-five (25), and Thirty-six (36); the northeast quarter; the north half of the northwest quarter; the

668 southeast quarter of the northwest quarter; the north
half of the southeast quarter, and the southeast quarter
of the southeast quarter of Section Six (6); the south
half of Section Four (4); the north half of the northeast
quarter, and the northeast quarter of the northwest
quarter of Section Eight (8); the north half, the north
half of the southeast quarter, the southeast quarter of
the southeast quarter, and the northeast quarter of the
southwest quarter of Section Nine (9); the northeast
quarter, the north half of the northwest quarter, the
southeast quarter of the northwest quarter, the north
half of the southeast quarter, and the southeast quarter
669 of the southeast quarter of Section Fifteen (15); the
north half, the southeast quarter, the north half of the
southwest quarter, and the southeast quarter of the
southwest quarter of Section Twenty-three (23); the
northeast quarter of the northwest quarter, and the east
half of Section Twenty-six (26); and the east half of the
southwest quarter, and the east half of Section Thirty-
five, in Township Twenty-five (25) South, Range Twen-
ty-one (21) East, Mount Diablo Base and Meridian; all
of Sections Twenty-four (24), Thirty-one (31), Thirty-
two (32), Thirty-three (33), and Thirty-four (34); the
north half, the southeast quarter and the northeast
670 quarter of the southwest quarter of Section Twenty-five
(25); and the north half, the southwest quarter and the
northwest quarter of the southeast quarter of Section
Twenty-six (26), in Township Twenty-five (25) South,
Range Twenty-two (22) East, Mount Diablo Base and
Meridian; the east half, the north half of the northwest
quarter, and the southeast quarter of the northwest
quarter of Section One (1); the north half of the north-
east quarter, the southwest quarter of the northeast
quarter, and the northeast quarter of the northwest
quarter of Section Two (2); the east half and the south-
671 west quarter of Section Twelve (12); the east half and
the east half of the west half of Section Thirteen
(13); the east half of Section Twenty-four (24); and the
east half of the east half of Section Twenty-five (25), in
Township Twenty-six (26) South, Range Twenty-one
(21) East, Mount Diablo Base and Meridian; all of Sec-
tions Four (4), Five (5), Six (6), Seven (7), Eight (8),
Fifteen (15), Sixteen (16), Seventeen (17), Eighteen
(18), Nineteen (19), Twenty (20), Twenty-one (21),
Twenty-two (22), Twenty-nine (29), Thirty (30), and
Thirty-two (32); the east half, the northwest quarter,
the north half of the southwest quarter, and the south-

672 east quarter of the southwest quarter of Section Thirty-
one (31); the southwest quarter of the southeast quar-
ter, and the west half of Section Thirty-three (33); the
west half, the north half of the northeast quarter, and
and the southwest quarter of the northeast quarter of
Section Twenty-eight (28); the northwest quarter, the
north half of the northeast quarter, the southwest quar-
ter of the northeast quarter, and the northwest quarter
of the southwest quarter of Section Twenty-three (23);
the southwest quarter and the southwest quarter of the
northwest quarter of Section Thirteen (13); the west
half, the southeast quarter, the west half of the north-
673 east quarter, and the southeast quarter of the northeast
quarter of Section Fourteen (14); the north half, the
north half of the southwest quarter, and the southwest
quarter of the southwest quarter of Section Nine (9);
the northwest quarter and the northwest quarter of the
northeast quarter of Section Ten (10); the southeast
quarter of the southwest quarter of Section Eleven (11);
and the west half, the west half of the east half and the
northeast quarter of the northeast quarter of Section
Three (3), in Township Twenty-six (26) South, Range
Twenty-two (22) East, Mount Diablo Base and Me-
ridian.

674 That on the 17th day of February, 1876, there was
granted to the plaintiffs, Miller and Lux, by letters pat-
ent, by the State of California, the following described
portion of said lands, viz:

The fractional northwest quarter of the northwest
quarter, and the fractional southeast quarter of the
northeast quarter of Section Eight (8); the fractional
southwest quarter of thes outheast quarter of Section
Nine (9); the fractional southwest quarter of the north-
west quarter, the fractional northeast quarter of the
southwest quarter, and the fractional southwest quarter
of the southeast quarter of Sectiou Fifteen (15); the
675 fractional southwest quarter of the southwest quarter of
Section Twenty-three (23); the fractional southeast
quarter of the northwest quarter, and the fractional east
half of the southwest quarter of Section Twenty--six
(26), and the fractional east half of the northwest quar-
ter of Section Thirty-five (35), in Township Twenty-five
(25) South, Range Twenty-one (21) East, Mount Diablo
Base and Meridian. Being all the swamp and over-
flowed lands in said subdivisions of said sections.

That, on the 11th day of September, 1876, there was
granted to the plaintiffs, Miller and Lux, by letters pat-

676 ent, by the State of California, the following described portion of said lands, viz:

The north half, the north half of the southwest quarter, the north half of the southeast quarter, the southeast quarter of the southeast quarter of Section Six (6), and the northeast quarter, the northeast quarter of the northwest quarter, and the northeast quarter of the southeast quarter of Section Eight (8), in Township Thirty (30) South, Range Twenty-four (24) East, Mount Diablo Base and Meridian.

That on the 14th day of June, 1877, there was granted to the plaintiffs, Miller and Lux, by letters patent, by
677 the State of California, the following described portion of said lands, viz:

All of Sections Four (4); the east half of the northeast quarter, and the northeast quarter of the southeast quarter of Section Eight (8); all of Section Sixteen (16); the west half of Section Twenty-two (22); the south half of Section Twenty-six (26); the north half of the northeast quarter, and the southeast quarter of the northeast quarter of Section Twenty-eight (28); and the north half of the northeast quarter, the southeast quarter of the northeast quarter, and the northeast quarter of the southeast quarter of Section Thirty-four
678 (34), in Township Twenty-eight (28) south, Range Twenty-two (22) east, Mount Diablo Base and Meridian; the east half of the northeast quarter, and the northwest quarter of the northeast quarter of Section Two (2); and the northeast quarter, and the northeast quarter of the southeast quarter of Section Twelve (12), in Township Twenty-nine (29) south, Range Twenty-two (22) east, Mount Diablo Base and Meridian; the west half of Section Six (6); the west half of Section Eight (8); the west half of Section Sixteen (16); the east half of the northeast quarter, and the northwest quarter of
679 the northeast quarter of Section Eighteen (18); the east half of the northeast quarter, and the northwest quarter of the northeast quarter of Section Twenty (20); the west half of Section Twenty-two (22); all of Section Twenty-six (26); the northeast quarter, and the northeast quarter of the northwest quarter of Section Twenty-eight (28); the northeast quarter of the northeast quarter of Section Thirty-four (34); and all of Section Thirty-six (36), in Township Twenty-nine (29) south, Range Twenty-three (23) East, Mount Diablo Base and Meridian; the north half of the northeast quarter; the southeast quarter of the northeast quarter, and the

680 northeast quarter of the northwest quarter of Section One (1), in Township Thirty (30) South, Range Twenty-three (23) East, Mount Diablo Base and Meridian; the west half of Section Ten (10), in Township Thirty (30) South, Range Twenty-four (24) East, Mount Diablo Base and Meridian.

That under and in pursuance of a statute of this State, to-wit.: the Act entitled "An Act to provide for determining the rights of parties in certain swamp and overflowed lands in Fresno and Kern counties," approved March 20th, 1878, it was in the case of *People* v. *Center et al.*, in the late District Court of the Twelfth
681 Judicial District, in and for the City and County of San Francisco, State of California, by a decree of said Court filed the 17th day of September, A. D. 1878, ordered, adjudged, and decreed that Miller, Lux and Crocker, (the plaintiffs herein), have judgment and are entitled to a patent, as in said Act provided, for the following portion or said lands, to-wit.; the east half of Section Five (5); all of Section Nine (9); the east half of the west half, and the east half of Section Twenty-one (21); the east half, the northwest quarter, the north half of the southwest quarter, the southeast quarter of the southwest quarter of Section Twenty-seven (27); and
682 all of Section Thirty five (35), in Township Twenty-eight (28) South, Range Twenty-two (22) East, Mount Diablo Base and Meridian; all of Section One (1) in Township Twenty-nine (29) South, Range Twenty-two (22) East, Mount Diablo Base and Meridian; the east half, the northwest quarter, the north half of the southwest quarter, the southeast quarter of the southwest quarter of Section Seven (7); the east half, the northwest quarter, the north half of the southwest quarter, and the southeast quarter of the southwest quarter of Section Seventeen (17); all of Section Twenty-one (21); the north half of the southwest quarter, the north half,
683 the southeast quarter of Section Twenty-seven (27); and the northeast quarter, the north half of the northwest quarter, the southeast quarter of the northwest quarter, and the northeast quarter of the southeast quarter of Section Thirty-five (35), in Township Twenty-nine (29) South, Range Twenty-three (23) East, Mount Diablo Base and Meridian; all of Section Five (5); the east half, the northwest quarter, and the north half of the southwest quarter of Section Nine (9), in Township Thirty (30) South, Range Twenty-four (24) East, Mount Diablo Base and Meridian.

684 That of the said lands above described as having been granted on the 17th day of February, 1876, by the State of California by letters patent to plaintiffs Miller and Lux, the plaintiff James C. Crocker, upon and at the time of the issuance of the patent therefor, by conveyance from said Miller and Lux, acquired and became the owner of an undivided one-third ($\frac{1}{3}$) part. That of the said land above described as having been granted on the 11th day of September, 1876, by the State of California by letters patent to plaintiffs Miller and Lux, the plaintiff James C. Crocker, upon and at the time of the issuance of the patent therefor, by conveyance from
685 said Miller and Lux, acquired and became the owner of an undivided one-third ($\frac{1}{3}$) part. That of the said lands above described as having been granted on the 15th day of June, 1877, by the State of California by letters patent to plaintiffs Miller and Lux, the plaintiff James C. Crocker, upon and at the time of the issuance of the patent therefor, by conveyance from said Miller and Lux, acquired and became the owner of an undivided one-third ($\frac{1}{3}$) part.

2.

686 That the said lands described in the patents mentioned in finding No. 1, were until granted by the State, as set forth in said finding, the property of the State of California, and said State was the owner thereof, and the plaintiffs had not, prior to the issuance of said patents, any right, title, interest, claim, demand or possession, legal or equitable, of, in or to said lands or any part thereof; and that the said lands mentioned in said finding No. 1 as having, in the case of *People* v. *Center et al.*, been adjudged and decreed to these plaintiffs, were until the filing of the decree in the said case of *People* v. *Center*, the property of the State of California,
687 and said State was the owner thereof, and the plaintiffs had not, prior to said filing of said decree, any right, title, interest, claim, demand or possession, legal or equitable, of, in or to said lands or any portion thereof.

3.

That the said lands of plaintiffs are situated in and form part of the body of swamp and overflowed lands designated in these findings and on the map hereto annexed as Buena Vista Swamp, but that said lands do not, nor does any part thereof, border on Buena Vista

688 Slough, nor are said lands or any part thereof situated along Buena Vista Slough, except that as is set forth in findings 18, 71 and 72. The channel of said slough is traceable through the west half of Section Ten (10) and the northeast quarter of Section Five (5), in Township Thirty (30) South, Range Twenty-four (24) East, and as far north as Section Twenty-four (24), in Township Twenty-nine (29) South, Range Twenty-three (23) East, Mount Diablo Base and Meridian; and that the said lands of plaintiffs are, as shown on the annexed map, situated in said Buena Vista Swamp, to which the term Buena Vista Slough is sometimes applied.

689

4.

That except that, that portion of Buena Vista Slough from where New River enters it to Buena Vista Lake, has from the time of the formation of said New River to said slough been a part of said New River, said Buena Vista Slough has not from time immemorial, or for any time, or at all, been a part of Kern River, or of any natural stream or water course.

5.

690 That the waters of Kern River have not nor have any waters flowed to or through Buena Vista Slough at any time or at all, except that as stated in finding 4, that portion of Buena Vista Slough south of where New River enters it has been a part of said New River from the time of the formation thereof to said slough; and except that, as stated in finding 9, the waters flowing down New River continued to and into Buena Vista Slough and thence to and into Kern and Buena Vista Lakes, and that as stated in said finding 9 and in findings 71 and 79, in times of overflow a portion of such
691 overflow would extend northward over Buena Vista Swamp; and except that, as stated in finding 11, in times of high water a portion of the waters of New River flow through the shallow channel in said finding mentioned, to said slough and thence to Buena Vista and Kern Lakes; and except as is stated in finding 12 and in findings 71 and 79, a portion of the overflow of Buena Vista and Kern Lakes would find its way northward along Buena Vista Slough to and over Buena Vista Swamp; and except that, as is stated in finding 67, the regular and natural flow of the waters of New River into Buena Vista and Kern Lakes was interrupted by a

692 dam thrown across said slough, and said waters were forced to flow northward along said slough to and over Buena Vista Swamp, until, as stated in said finding 67, said dam breaking said waters resumed their natural flow to said lakes; and except that, as stated in finding 68, in the year 1877, by the reconstruction of the said dam and the erection of other obstructions, the waters of New River were again turned northward along said slough to and into the canals of the Kern Valley Water Company; and except that, as stated in finding 70, there is a certain percolation and seepage from said river and said lakes by which said swamp is irrigated and moist-
693 ened and from which water at times rises therein and flows from one hole or depression to another.

6.

That Kern River is a natural stream or watercourse, rising in the Sierra Nevada, and debouching from the mountains into the plains about ten miles northeasterly from the town of Bakersfield, in Kern County—and thence as far down as to a point in Section Seventeen (17), Township Twenty-nine (29) South, Range Twenty-eight (28) East, Mount Diablo Base and Meridian—has
694 always, within the memory of man, flowed in the same channel; but that after reaching said point the course of the river was anciently and down to the winter of 1861–2 in part along a channel known as the South Fork, which then diverged to the left, or southerly, and following a course almost due south, emptied into Kern Lake at its easterly end, and in part along the course of the present channel of the river some three or four miles to a point in Section Twenty-six (26), in Township Twenty-nine (29) South, Range Twenty-seven (27) East, Mount Diablo Base and Meridian; and thence to the left, or southerly, along the channel known as Old
695 River, which followed a southwesterly course and emptied into Kern and Buena Vista Lakes; but until the winter of 1861–2 said South Fork was the main channel of Kern River.

7.

That the waters of Kern River, up to 1862, did not use to run southerly through said South Fork, and thence northerly through Kern Lake, Buena Vista Lake (and the connecting channel between them), and Buena Vista Slough into Tulare Lake; but that up to the winter

696 of 1861-2 the waters of Kern River used to run in part southerly through said South Fork to Kern Lake, and in part through Old River to Kern and Buena Vista Lakes, and did not run thence to or into Tulare Lake or out of said Kern and Buena Vista Lakes, except as is stated in Finding 12.

8.

That in the winter of 1861–2 a flood closed the said South Fork at its head, but said flood did not at the same time open a new channel; but in the winter of 1861–2 a flood closed the South Fork at its head, and
697 thenceforth, and until the winter of 1867–8, the natural flow of the waters of Kern River was down to, into, and through said Old River; except that in occasional times of extraordinary high water some water would pass beyond the head of Old River, and, following the course of the channel now known as "New River" down to a point in or about Section Thirty-one (31), in Township Twenty-nine (29) South, Range Twenty-seven (27) East, Mount Diablo Base and Meridian, would there turn to the right, or northward, and continue along the channel known as Goose Lake Slough, and so designated on the map hereto annexed. That from the time when said
698 flood took place, in the winter of 1861–2, until the winter of 1867–8, the said Old River was the main channel of Kern River, and, except as above stated, carried and conveyed in their natural flow all the waters of Kern River to and into Kern and Buena Vista Lakes.

9.

That in the winter of 1867–8 another flood, carrying a large volume of water past the head of Old River, followed the course of the channel now known and designated on the map hereto annexed as "New River," down
699 to the head of Goose Lake Slough aforesaid, in or about Section Thirty-one (31), in township Twenty-nine (29) South, Range Twenty-seven (27) East, Mount Diablo Base and Meridian; and from that point some water passing on southwesterly opened up the balance of the present channel of Kern River, marked on said map "New River;" and thenceforth, until the year 1869 the waters there reaching divided at the head of said Goose Lake Slough, and a portion thereof continued down said newly made channel. That during the winter of 1868–9, owing to the shifting of the sands in the bed of

700 the channel, said Goose Lake Slough was closed at its head, and thereafter no water except in occasional years of unusual high water, has flowed naturally into said slough. That after the flood of 1867–8 the waters of Kern River, in their natural flow and at ordinary stages, divided at the head of Old River, and one-half thereof continued down Old River, and the other half followed the present channel of Kern River, known as "New River," except as above stated. But in times of unusual freshets the greater body of water flowed down New River. That such continued to be the flow of the waters of Kern River until the fall of 1877, when the Stine Canal Com-
701 pany built its headgate across Old River at its head, thereby and thenceforth obstructing and preventing the free flow of the waters into the said channel of Old River, and turning the greater portion thereof down the channel of New River, which is, and from the date last aforesaid has been, the main channel of Kern River. That from and after the flood of 1867–8 the waters flowing down New River, except such portion thereof as passed into Goose Lake Slough as aforesaid, continued on in their natural flow to and into Buena Vista Slough, and thence to and into Buena Vista and Kern Lakes. But that in times of melting snow, causing
702 occasional and unusual freshets and extraordinary high water, some water would overflow the banks of said river, at or in the vicinity of Buena Vista Slough, and a portion of such overflow would extend to and as far northward as it reached, spread from side to side over the aforesaid body of swamp and overflowed lands, designated as Buena Vista Swamp.

10.

That from the head of Old River to Cole's Crossing,
703 what is known as New River, is the present main channel of Kern River; but that the same was not the main channel of Kern River, prior to 1877; and the flood of 1867-8 did not open that part of New River from the head of Old River to the head of Goose Lake Slough.

11.

That said New River diverges from Old River towards the right, but not northerly; after leaving Old River it runs southwesterly, and joins the Buena Vista Slough at or about Section Five (5), in Township Thirty-one

704 (31) South, Range Twenty five (25) East, Mount Diablo Base and Meridian, at the point known as Cole's Crossing and so designated on the map hereto annexed, and flows thence to Buena Vista and Kern Lakes, and does not join Buena Vista Slough in or near Section Thirty (30), Township Thirty (30) South, Range Twenty-five (25) East, Mount Diablo Base and Meridian, except that in times of high water, a portion of its waters do flow through a shallow channel, (shown on the map to these findings annexed), and empty into said slough on or about said Section Thirty (30), and thence flow northerly into Buena Vista Swamp.

705

12.

That until the construction of the works of the Kern Valley Water Company, in these findings mentioned, occasionally in the winter and spring time of the year, unusual freshets would cause Kern and Buena Vista Lakes to overflow, and a portion of such overflow would find its way northward along Buena Vista Slough and the adjacent country, to and over said body of swamp and overflowed lands, within which plaintiffs' said lands are situated; following, however, no defined course or chan-
706 nel, but generally spreading from side to side throughout said swamp, as far northward as the water reached.

13.

That except from the seepage and percolation and the overflows in these findings mentioned, and from the effect of the artificial obstructions at Cole's Crossing, in these findings described, none of the waters of Kern River flow or ever have flowed to, along, by, through, over or upon the lands of plaintiffs, or any part thereof.

707

14.

That except by being turned northward by the artificial obstructions at Cole's Crossing, in these findings described, and by the overflows and the seepage and percolation in these findings mentioned, none of the waters of Kern River irrigate, or ever have irrigated any of the said lands of plaintiffs; or make or ever have made said lands or any part thereof fit for cultivation, or pasture, or supply, or ever have supplied on said lands, or any part thereof, water for stock or for agricultural or domestic purposes, or for all or any purposes for

708 which an owner of land, bordering on a running stream has a right to use the waters thereof, or for any purposes.

15.

That the diversion, appropriation and consumption of the waters of Kern River, by the defendant, has not prevented or interfered with the natural flow of said waters, or any part thereof, to or through said Buena Vista Slough at any point north of where New River enters it, or to, along, by, through, over or upon the said lands of plaintiff, or any portion thereof, nor has
709 it prevented or interfered with the irrigation of said lands or any part thereof, or the making the same fit for cultivation, or pasture, or the supply of water thereon for stock, or agricultural, or domestic, or other purposes.

16.

That the changes in the course of Kern River, in the preceding findings stated, have affected the supply of water to said Buena Vista Slough and have diminished the supply of water to that portion of said slough north of where New River enters the same, and rendered less
710 frequent the overflows in these findings mentioned. That the flood of 1867-8 in opening up the channel known as New River, carried down large quantities of earth, sand and other matter, and deposited the same in and near said Buena Vista Slough north of Buena Vista Lake, and south of Buena Vista Swamp, thereby filling up the slough at that point, and enlarging the surface area and holding capacity of Kern and Buena Vista Lakes, and increasing the evaporation therefrom. That said waters of Kern River carry a great amount of sediment and sand; and that each year since said flood a
711 portion of such sand and sediment, as well as brush and other matter brought down, has been deposited in and near Buena Vista Slough, thereby still further increasing the said capacity of said lakes and rendering still less frequent the overflows, in these findings mentioned. That from the place where New River enters Buena Vista Slough, the waters of Kern River there flowing in their natural condition, flow southward through said slough and into Buena Vista and Kern Lakes, until said lakes are full, and when full, said Lakes extend so far northward before overflowing, as to embrace within their limits the junction of said river with said slough.

712 17.

That in their natural condition, whatever of the waters of said river or of said lakes, find or ever found their way northward and into said swamp, do not and never did so flow as to constitute a water-course; and the same are and always have been used and accustomed, whenever they reach it, to flow generally over and through said swamp and to squander themselves over the same, spreading from side to side, and having as a boundary and border on each side, the public lands of the United States, outside of the segregation lines
713 of said swamp, as laid down on said map.

18.

That in part, the diagram annexed to the complaint herein, shows the courses and channels of Kern River, and the sloughs and lakes in said complaint mentioned, but not fully and correctly, and except in the particular in finding No. 72 specified, the same are correctly and fully shown and delineated on the map hereto annexed, marked "Exhibit A," and made part of these findings; and said map marked "Exhibit A," correctly shows the body of swamp and overflowed lands within Kern
714 County, which is referred to in these findings as "Buena Vista Swamp."

19.

That the acts done by the defendant in and about the diverting and taking a portion of the waters of Kern River, as in these findings set forth, were done and committed with a knowledge of such of the facts set forth in the complaint herein, only as are in these findings mentioned and found to be true, but that said acts were done and committed without any intention to in-
715 jure the plaintiffs, or any or either of them, or the lands of the plaintiffs or any part thereof, and were done and committed in good faith, and in the belief that as the prior appropriators of said water, the defendant had a right to do and commit said acts; and the same were done and committed as a means of improving and irrigating certain lands adjoining and near the Calloway Canal, and in these findings described and stated.

20.

That except in doing the acts in these findings specified, constituting and relating to the Calloway appro-

716 priation, and constructing the Colloway Canal and works and diverting and using the waters of Kern River through and by means thereof, the defendant did not dig away or remove a part or any of the bank of Kern River, or construct a ditch or canal leading away from said river, or thereby or by other works divert or appropriate any of the waters of Kern River, or consume the same, or prevent it from flowing to, along, by, through, over and upon the lands of plaintiffs.

21.

717 That ever since the 4th day of May, A D. 1875, defendant has claimed the right to divert, appropriate and consume the water by the Calloway Canal and its other works diverted and appropriated.

22.

That the defendant did not, by digging away or removing any of the bank of Kern River, or by constructing any canal or ditch, or otherwise, prevent any of the waters of said river from flowing to, along, by, through, over, or upon any of the said lands of the plaintiffs; nor has defendant, by reason of any works by it done
718 or erected, or otherwise, hindered or prevented any of said waters from flowing to, along, by, through, over or upon the said lands; nor have any of said waters been prevented from so flowing by reason of any diversion, appropriation or consumption thereof by defendant, except as in these findings stated.

23.

That, except that, as set forth in these findings, the lands to irrigate which defendant has diverted and is diverting water from Kern River, border upon Kern
719 River, and embrace one of its banks at the head of the Calloway Canal, and that they are and always have been the lands of the United States of America, and that the United States is the riparian owner of all the land on both sides of said river, and that in compliance with law, the defendant and its grantors appropriated the water diverted by it as set forth in Findings 44, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60 and 61; said lands are not and never have been naturally irrigated by any of the waters of Kern River or otherwise, nor is the right to the flow of said waters naturally incident and appurtenant to the same or any part thereof.

720 24.

That except from the percolation and seepage in these findings mentioned, no water ran through or in said Buena Vista Slough, nor through, to, by, along, over or upon the said lands of plaintiffs, between July, 1878, and the commencement of this action but that such failure of said water so to flow was not by reason of any taking out, diversion or appropriation thereof, or other act by or on the part of the defendant.

25.

721 That during the period in the preceding finding mentioned, Buena Vista Slough, from Buena Vista Lake to Buena Vista Swamp, was dry, but said swamp was not dry; That such condition of said slough was not in conseqnence of any diversion or appropriotion of defendant.

26.

That, except from the percolation and seepage in these findings mentioned, during the period in the preceding finding mentioned, the waters of Kern River did not irrigate or moisten said lands of plaintiffs, or
722 supply water thereon; but that said water did not during said period fail to irrigate and moisten said lands, or to supply water thereon for general uses, as it would naturally have done; and that it was not in consequence of any diversion or appropriation by defendant, that said water failed to or did not irrigate, moisten, or supply any of said lands of plaintiffs.

27.

That none of the said lands of the plaintiffs were, during said period in the preceding finding mentioned,
723 deprived of their natural moisture; nor in consequence of any deprivation of their natural moisture, or of any diversion or appropriation by defendant, did they become dry or deteriorated in value.

28.

That a continuance of the diversion and appropriation of the water of Kern River in the future to the extent it has taken place heretofore, and to the capacity of the Calloway Canal, will not deprive the said lands of the plaintiffs of their natural moisture, or

724 cause them to become dry or deteriorated in value, or deprive them of water for general uses, or prevent them from being irrigated or moistened by the waters of said Kern River.

29.

That owing to the nature of the climate and the country, and the slight rainfall where the said lands of plaintiffs are situated, the same, unless irrigated by waters flowing from a distance, are unfit for cultivation and pasture; and there is no natural irrigation of them, except that, as is stated in these findings, they are
725 moistened and naturally irrigated by the percolation and seepage and overflows in these findings mentioned; and there is no means of irrigating them at all save by the waters of Kern River, or of Buena Vista and Kern Lakes.

30.

That said lands of the plaintiffs have not always (except in seasons of extreme drought, and except when prevented by diversion) been wet and naturally irrigated, during the winter and spring, by the natural
726 flow of the waters of Kern River; that except by the water reaching them through or in consequence of the seepage, percolation, overflows and obstructions at Cole's Crossing, in these findings set forth, said lands have never been wet or irrigated by any waters of Kern River.

31.

That except by the seepage and percolation and the overflows in these findings mentioned, and except as stated in Finding 79, the waters of Kern River did not cause said lands of the plaintiffs, or any portion thereof,
727 to be swamp and overflowed land.

32.

That there has always been pasture on said lands of the plaintiffs, without artificial irrigation, but that it never has been possible, without artificial irrigation, to cultivate or raise crops on said lands; that the pasturage on said lands consists of a growth of tules, to the perfection of which artificial irrigation is not requisite.

728 33.

That the facts that the said lands of the plaintiffs were supplied with water, and were useful for pasturage in dry years, as and to the extent stated in these findings, entered into the consideration of plaintiffs in purchasing said lands, but except as in this finding stated, the plaintiffs were not induced to purchase said lands because they were wet or irrigated, or designated as swamp and overflowed lands.

34.

729 That plaintiffs did not pay large or any sums of money for said lands of plaintiffs, or expend large or any sums of money in improving the same, or in constructing works for controlling, regulating or utilizing any water supplied to them, on the faith that said lands would have the benefit of the natural or other irrigation or overflow of water for other uses or otherwise; nor have plaintiffs constructed any such works.

35.

That since the diversion by the defendant herein
730 found, the said lands of the plaintiffs have not been drying up, and have not been becoming less fit to produce crops or support cattle, nor will said lands dry up or be continually drying up, or become less fit to produce crops and support cattle, unless defendant be restrained and enjoined from diverting the water.

36.

That in consequence of the diversion and appropriation and consumption of the waters by defendant, it has not become and is not necessary to pump water on
731 plaintiffs' lands, nor will it in the future be necessary by reason of a continuance of such diversion, appropriation and consumption to pump water thereon; and that it has not been necessary, and will not, unless defendant be restrained from so diverting and appropriating and consuming the waters of Kern River, be necessary to pump water on said lands, except in extremely and unusually dry and rarely recurring years; but that such pumping has not been and will not be in any manner necessitated or occasioned by the aforesaid diversion, appropriation and consumption by defendant, or by any continuance thereof.

732 37.

That the waters of Kern River rise amongst the highest mountains of the Sierra Nevada, where there is at times a great accumulation of snow; that at such times the melting of the snow is liable to cause great and irresistible floods; that the river bed below the foothills is shallow, and of insufficient capacity in time of flood to carry off the waters which then sweep over the adjacent country; that such accumulation of snow is not usual or accustomed, but is only occasional and in rarely recurring years.

733 38.

That willows and other trees and shrubs began from time immemorial, and before the diversion by the defendant herein stated, to grow up in the bed of Kern River, both above and below the point of said diversion, and the same are still growing and becoming year by year more serious obstructions to the river channel; but that such growth was not by reason of or a consequence of or enhanced by said diversion.

39.

734 That if left to the operation of natural causes, in times of flood all the water of Kern River might and probably would be forced aside from its present channel, so as never to reach any of said lands of plaintiffs; but that there is no danger that by reason of the diversion of the defendant, or otherwise than as is stated in Finding 41, said water would be forced aside from its present channel, or be diverted from any portion of said lands, or that said lands will suffer any detriment.

40.

735 That the country along Kern River below where the South Fork branches off is destitute of hills; that Kern and Buena Vista Lakes, Goose Lake and Tulare Lake occupy the lowest depressions of the valley between the Sierra Nevada and Coast Range of mountains; that the country along said river slopes gradually towards Kern and Buena Vista Lakes to the south, and towards Goose Lake and Tulare Lake towards the north; that Goose Lake and Tulare Lake are lower than Kern and Buena Vista Lakes; but that said lakes do not, nor does any two or more of them, form or constitute a chain of

736 lakes, except that Kern and Buena Vista Lakes are connected, and since the year 1868, when full, form one continuous sheet of water.

41.

That from any point on Kern River, from the mountains down to Buena Vista Slough, a line drawn across the country to Tulare Lake, by way of Goose Lake, would be much shorter than the present course taken by the water which reaches Tulare Lake; that the soil between Kern River (below the foothills) and Goose
737 Lake is everywhere light and sandy, and such as would offer little resistance to a current of water; that several large canals have been made on the northerly side of Kern River, leading towards Goose Lake, and connecting with an old slough, which continues on and leads into Goose Lake, but that said Goose Lake does not connect with Tulare Lake; that however the channel of said Kern River may become obstructed by trees and shrubs, or otherwise, there is no danger that in case of a flood in said river the whole body, or any, of its waters will take the shortest course, or any course, to Goose Lake; but the said river, if so obstructed,
738 in case of flood, would probably be permanently shifted more to the left or southward, and take a shorter course than at present to Kern and Buena Vista Lakes; and, except as herein stated and found, there is no danger that any of the water of said river may take the shortest course to Goose Lake, or the river bed be permanently shifted, or any of its waters diverted from any of the said lands of plaintiffs, or that thereby the same would be in any manner affected or depreciated in value.

42.

739 That except such rights as were acquired by the Calloway appropriation, in these findings mentioned, defendant is not the owner of any land, and never has been a riparian proprietor on said Kern River, nor on any of the waters, sloughs or channels thereof, nor on any of the lakes in these findings mentioned.

43.

That the said lands of plaintiffs have not been irreparably or otherwise injured by any act or acts of the defendant, or by its diversion, appropriation or use of

740 the waters of Kern River, in these findings set forth, and that the said acts of the defendant, if suffered to continue, will not be or cause irreparable or any injury to said lands, or any part thereof, and will not cause the ruin of said lands, or any part thereof; that they will not be grievances, but will be constantly recurring, and will be such as can be compensated in damages; and that for the same the plaintiffs have, and always will have, a plain, speedy and adequate remedy and relief at law.

44.

741 That the defendant is, and at the time of the commencement of this action and prior thereto was, a corporation duly created, organized and existing under, in pursuance and by virtue of the laws of the State of California; that defendant was incorporated on the 18th day of May, A. D. 1875, for the purposes of constructing a canal known as the Calloway Canal, which is in these findings hereinafter more particularly described, for irrigating, manufacturing, commercial and mining purposes; of buying and selling, leasing or otherwise acquiring lands, and managing the same; of raising, buying and selling live stock, and generally engaging
742 in every branch of business pertaining to canals, agricultural, timber, mineral or grazing lands.

45.

That the said lands of plaintiffs have never bordered or been situated, in whole or in part, upon any water course or natural stream.

46.

That no water course or natural stream flows or flowed to, along, by, through, over or upon said lands of plain-
743 tiffs, or any part thereof.

47.

That there is not and has not been any right whatsoever to the flow of the waters of Kern River, naturally or otherwise, incident or appurtenant to said lands of plaintiffs, or any part thereof.

48.

That plaintiffs are not and have not been, nor is or was any of them, the riparian proprietors or proprietor,

744 owners or owner of lands on or bordering upon Kern River, or any of the branches, sloughs or channels thereof.

49.

That plaintiffs are not and have not been, and that none of them is or ever has been, by virtue of the ownership, possession or occupation of the said lands of plaintiffs or otherwise, riparian proprietors, owners, proprietor or owner, or entitled to have the waters of Kern River, or any part thereof, flow to, along, by, through, over or upon said lands, or any part thereof,
745 or to take out, divert, appropriate or use any of said waters.

50.

That except the said Buena Vista swamp and except the sixteenth (16th) and thirty-sixth (36th) sections in each township, which belong to the State of California, all the lands delineated upon and embraced by the map hereto annexed, marked "Exhibit A," are and always have been public lands of the United States of America.

51.

746 That on the 4th day of May, 1875, the grantors of the defendant, desiring to appropriate seventy-four thousand (74,000) inches of the waters of Kern River, measured under a four-inch pressure, posted a notice in writing in a conspicuous place at the point of intended diversion, which is in these findings specified, and stated therein: First, that they claimed the waters of Kern River there flowing, to the extent above mentioned; Second, the purposes for which they claimed it and the place of intended use, as is in these findings specified; Third, the means by which they intended to divert said
747 water, and the size of the ditch or acqueduct through which they intended to divert it, as in these findings is specified. A copy of said notice was within ten days after it was posted as aforesaid, recorded in the office of the County Recorder of the County of Kern, in which county said notice was posted. Within sixty days after said notice was posted, the defendant commenced the excavation and construction of the said works in which it was intended to divert said water, and prosecuted said works diligently and uninterruptedly to completion, and thereby diverted said waters to the place of intended use.

748 52.

That the notice mentioned in the preceding finding was posted at the point on the north bank of Kern River, in Section Thirteen (13), in Township Twenty-nine (29) south, Range Twenty-seven (27) east, Mount Diablo Base and Meridian, where the Calloway Canal diverges from Kern River, as shown on the map hereto annexed, marked "Exhibit A," which said point was the point designated and intended by the said grantors of the defendant as the point of diversion of said water.

749 53.

That as stated in said notice so posted as mentioned in the preceding finding, said water was appropriated for the purpose of irrigating and supplying with water the lands along the route of and susceptible of irrigation by the Calloway Ditch or Canal, as at present constructed, and as designated upon the map hereto annexed, marked "Exhibit A."

54.

That as stated in said notice so posted as hereinbe-
750 fore mentioned, the said grantors of the defendant intended to divert the water appropriated by them, by means of a main ditch or canal, known and in these findings designated as the Calloway Canal, commencing at said point where said notice was posted as hereinbefore found, running thence in a southwesterly course into Section Twenty-two (22), in Township Twenty-nine (29) south, Range Twenty-seven (27) east, Mount Diablo Base and Meridian, a distance of about two and one half ($2\frac{1}{2}$) miles, one hundred and twenty feet wide on the bottom, four feet deep, and one hundred and twenty-eight feet wide on the top; thence in a south-
751 westerly course two and one half ($2\frac{1}{2}$) miles, one hundred feet wide at the bottom, four feet deep, and one hundred and eight feet wide at the top; thence in a northwesterly course to Tulare Lake, thirty (30) miles, more or less, one hundred feet wide at the bottom, four feet deep, and one hundred and eight feet wide at the top.

55.

That the said Notice of Appropriation was signed by the said grantors of the defendant, who, prior to the commencement of this action and within sixty days after

752 the posting of their said Notice of Appropriation, as set forth in these findings, by their voluntary association, formed the said corporation defendant, and granted and conveyed to it all their said water right, privilege and claim, and all their claim to the waters of Kern River, and all rights and privileges acquired by them by virtue of the said Calloway appropriation, ditch and canal mentioned in these findings; and by reason thereof, there became and were vested in the said corporation defendant, and it succeeded to and entered into the possession of, and has ever since continued to have, possess and enjoy the said canal and ditch, and
753 all the tenements, appurtenances, rights, powers and privileges and property theretofore vested in or belonging to its said grantors, or to which they were or became entitled by virtue of said appropriation, or of any of the acts by them performed.

56.

That the Notice of Appropriation of said Calloway Canal in these findings set forth, was recorded by the County Recorder of said County of Kern, in Volume One of Water Rights, the book kept by him according
754 to law for the purpose of recording notices of appropriation of water, on pages 37, 38 and 39.

57.

That upon the execution of the deed and the delivery of possession of said property to the defendant, and within sixty days after the posting of the notice in the preceding finding mentioned, the defendant surveyed and staked out the line of said Calloway Canal as now constructed and as described in said Notice of Appropriation, and began the excavation and construction of
755 said canal, and thenceforth up to the commencement of this action, prosecuted the work thereon diligently and uninterruptedly, and at the time of the commencement of this action had constructed and completed said canal to a point where it crosses Poso Creek, in Section Twenty-six (26), Township Twenty-six (26) south, Range Twenty-five (25) east, Mount Diablo Base and Meridian, as shown on the said map hereto annexed, a distance of about thirty (30) miles from its head at Kern River, of the following dimensions, to wit: One hundred and twenty (120) feet wide on the bottom, with a grade of four (4) feet per mile for the first two

and a half ($2\frac{1}{2}$) miles from the said point where it heads on said Kern River; then sixty (60) feet wide on the bottom, a distance of about two (2) miles, with a grade of about eight-tenths ($\frac{8}{10}$) of a foot per mile; then eighty (80) feet wide on the bottom for a distance of about three (3) miles, with a grade of eight-tenths ($\frac{8}{10}$) of one foot per mile, then eighty (80) feet wide on the bottom to Poso Creek, with a grade varying from eight-tenths ($\frac{8}{10}$) to four-tenths ($\frac{4}{10}$) of one foot per mile, and having a capacity to carry more than six hundred (600) cubic feet of water per second, but not sufficient to carry the said amount of seventy-four thousand (74,000) inches, measured under a four-inch pressure, as claimed in the Notice of Appropriation of water for said canal; and at said time of the commencement of this action, the defendant had also as contemplated by said appropriators and stated in said notice, constructed thirty (30) miles or more of main side or distributing ditches, of from twelve (12) to sixteen (16) feet in width on the bottom, connected with and leading from said main canal, and forming a part of its irrigation system, and irrigating and supplying with water, lands along the route of and susceptible of irrigation by said main canal; and the defendant had up to the time aforesaid, expended in constructing said main canal and side ditches, and the proper and necessary cost of the same had been more than the sum of one hundred and ten thousand ($110,000) dollars.

58.

That since the commencement and until the trial of this action, the defendant has diligently and uninterruptedly continued to prosecute the work of constructing the said main canal and branch ditches, in pursuance of and in accordance with said Notice of Appropriation, and has constructed more than fifty (50) miles of branch and distributing ditches, from twelve to sixteen feet wide on the bottom, in addition to those constructed before the commencement of this action.

59.

That in the fall of the year 1875, in further pursuance and execution of the intention expressed in said notice of appropriation, the defendant did dig away and remove a part of the bank of Kern River at the head of said canal, and did thereby, and by means of

said canal, divert and appropriate, for the purpose of softening the earth to be excavated, and thereby facilitating the constructing of said canal, a small quantity of said waters of Kern River; and since said year of 1875, as the construction of said canal progressed, the defendant has each year diverted through said canal, and conveyed through it and said ditches to the capacity of said Calloway Canal, a portion of the waters of Kern River, and has appropriated and applied the same to useful and beneficial purposes—that is to say, to irrigating and supplying with water lands in said notice of appropriation designated and lying along the route of said canal, and that all of said water so diverted has been needed, used and consumed on said lands.

60.

That the lands designated in said notice, and to irrigate which the waters of Kern River were appropriated, and the Calloway Canal was constructed as aforesaid, border upon and lie along said Kern River, and extend therefrom northward in one compact body along the route of said canal.

61.

That without the water so furnished by said Calloway Canal, the said lands lying along the route thereof, and designated in said notice of appropriation, would be as they had always been before the construction of said canal—desert and barren lands, and absolutely unproductive and worthless—but that the portion thereof which has been irrigated has proven to be highly productive and valuable; and that each year it will require less and less water to irrigate each acre of said lands, by reason of the fact that when dry and first irrigated it requires and absorbs more water than it does afterwards, when constantly irrigated, and that the water now conveyed by said canal will hereafter be sufficient to irrigate seventy thousand (70,000) acres of said lands, extending in a body from and including the north bank of Kern River, northwards.

62.

That from the South Fork down to Buena Vista Slough, a distance of about twenty-five miles, on both sides of Kern River, and extending many miles therefrom, there are large tracts of land, embracing many

764 thousands of acres, and very valuable and productive, and capable of sustaining a large population, when artificially irrigated, but which, when not so irrigated, were, and if deprived of such irrigation would again become, barren and unproductive and valueless; that the said lands can only be irrigated by appropriating and diverting and conveying to them the waters of said river, and that ever since the year 1864 and earlier it has been customary for all parties so desiring to so divert, appropriate and convey said waters on to said lands; and that in accordance with said custom and in conformity with law, prior to the first day of May, 1872,
765 several appropriations were made and several canals have been constructed in pursuance and consummation thereof, and that since said last mentioned date, and before the first day of May, 1875, in accordance with said custom, and in conformity with law, a large number of appropriations were made and many canals have been constructed in pursuance and execution thereof; that the larger of said canals are correctly delineated and named on the said map, hereto annexed, and that at the time of the commencement of this action the said lands were irrigated, and for many years prior thereto had been irrigated, with the said waters so ap-
766 priated through said canals, and in consequence thereof said lands had become profitable, productive and valuable, and settled upon and occupied by a large number of persons and families, and covered with grain fields, vineyards, orchards, gardens and homes; and that if deprived of such water, said lands will again become utterly barren, desert and worthless.

63.

That from, during and at the times when the acts in these findings set forth as constituting the appropria-
767 tion and diversion by the defendant and its grantors were done, the plaintiffs, and each of them, knew and were informed thereof, and knew and were fully and correctly informed of and concerning the intention of the defendant and its grantors to make said appropriation, and of the extent and purposes thereof, and knew that, in reliance upon the acquisition of the right to said water so appropriated, the defendant was expending, would expend and had expended the large amounts herein found in the construction of its said works, and that in like reliance third parties were about to expend and did expend much money and labor in irrigating

768 and cultivating the said lands along the route of said Calloway Canal; and were fully informed of all the circumstances surrounding and attending the location, construction and maintenance of said canal and works of defendant, and of the character of said lands; and that if prevented from using said water so appropriated all the said labor, expenditure and effort of the defendant would be fruitless and a total loss; and that the plaintiffs, until the commencement of this action, made no objection to the said appropriation or acts of the defendant, but acquiesced therein, and stood by while the defendant, from the year 1875 to the said
769 12th day of May, 1879, continued the construction of said canal, and diverted the waters of Kern River through the same every year during the period last aforesaid, and applied the same to the irrigation of said lands; that the said period during which the plaintiffs so neglected and delayed to notify the defendant of their claim to said water, or assert or prosecute whatever rights they had in the premises, was an unreasonable delay, and that the plaintiffs were thereby guilty of gross neglect, and long and unreasonable delay and laches.

770 64.

That the plaintiffs had actual knowledge of the proposed construction of the Calloway Canal, and of the purpose thereof, as herein found, before the same was commenced, and knew of the commencement of the construction thereof at the time such construction began, and knew of the proposed dimensions thereof, and of the continuous construction thereof, as hereinbefore found, and made no objection thereto, but acquiesced therein from the time of the commencement of said construction to the time of filing their com-
771 plaint in this action.

65.

That the natural drainage of Kern River and the surrounding country is, and ever has been, to and into Kern and Buena Vista Lakes, and that in their natural condition Kern and Buena Vista Lakes, when full, form one continuous body or sheet of water; that the natural and usual flow of the waters of Kern River, whether through the South Fork or through Old River or through New River, is and has ever been to and into said lakes, and that the ordinary and natural re-

772 ceptacle, terminus and place of discharge of the natural, usual and accustomed flow of the waters of Kern River is and ever has been Kern and Buena Vista Lakes.

66.

That the waters of Kern River do not and never did naturally and usually flow to, through, along, by, over or upon the said lands of plaintiffs, or any part thereof; and that until the year 1876, whatever of the water of Kern River flowed to or reached the said lands or any part thereof, was from the unusual and extraordinary
773 overflow of said river or of Kern and Buena Vista Lakes, or from the percolation and seepage in these findings mentioned.

67.

That in December, 1875, one Souther commenced, and in January, 1876, completed a dam across Buena Vista Slough, at a point designated on the map hereto annexed, as Cole's Crossing, on or about Section Five (5), Township Thirty-one (31) south, Range Twenty-five (25) east, Mount Diablo Base and Meridian, and south of where the waters of New River enter Buena
774 Vista Slough, and thereby at said point, checked the natural flow of the waters of said river through said slough into Buena Vista and Kern Lakes, and caused the water there flowing to take a northward course and away from the said lakes. That in March, 1876, the pressure of the waters against said dam, broke through the same, and said river resumed its natural flow to Buena Vista and Kern Lakes. That during the said interval of its flow northward, the waters of said New River flowed along said Buena Vista Slough and the adjacent country, to and over Buena Vista Swamp.

775

68.

That in the fall of 1876, certain parties commenced the construction of two certain canals, which are correctly laid down on the map hereto annexed, and marked respectively "East Side Canal" and "Kern Valley Water Co's. Canal." The said "East Side Canal" commences on Section Fourteen (14), Township Thirty (30) South, Range Twenty-four (24) East, and extends thence some three (3) miles north, on the eastern side of the said Buena Vista Swamp, and does not touch any of said lands of the plaintiffs. The other canal

776 heading on Section Fourteen (14), Township Thirty (30) South, Range Twenty-four (24) East, as at present constructed, extends northward some twenty-four (24) miles, is one hundred and twenty feet wide on the bottom, one hundred and forty feet wide on the top, and ten feet deep, with a fall of one foot per mile, and capable of carrying more than twelve hundred cubic feet of flowing water per second, and terminates at a point outside of said lands of plaintiffs. That in June, 1877, the Kern Valley Water Company, a corporation organized and existing under the laws of California, for the purpose of acquiring canals and water rights in said
777 County of Kern and elsewhere within this State, to be used or disposed of for irrigation, transportation, domestic, mechanical and other purposes, took possession and control of said canals, and thenceforth continued the construction thereof northward towards the lake known as Tulare Lake, designated on said map. That, in the fall of the year 1877, the said Kern Valley Water Company reconstructed the said dam at Cole's Crossing; and, in connection therewith, constructed a levee extending westward to the bluffs or high ground, and running eastward from said dam about one and one-quarter miles, as shown on said map, thereby prevent-
778 ing the waters of Kern River from flowing to Buena Vista Lake and turning the same northward to their said two canals. That, at the head of said canals, and in conjunction therewith, the said Kern Valley Water Company, in 1877, constructed a certain other dam and levee extending completely across the said Buena Vista Swamp, as shown on said map, and thereby completely obstructed and prevented the natural flow of any water into, through, or over said swamp northward of said last mentioned levee, and appropriated and took possession and control of all the waters reaching said levee, and turned the same into the said canals.
779 That the said dam and levee last mentioned are some distance southward from the southermost part of the said lands of the plaintiffs, and from and after their construction no water has naturally flowed, or could naturally flow, northward beyond the head of said canals, or to or upon the said lands of the plaintiffs or any part thereof.

69.

That the construction of the canals, dams and levees described in the preceding finding, was undertaken

780 and prosecuted with the knowledge, consent and approval of the plaintiffs. That the levee last described in said preceding finding was constructed for the purpose of diverting all the water reaching said levee, into the said canals, and such levee does entirely obstruct, and since its construction has obstructed, the natural flow of any water northward in said Buena Vista Swamp, beyond said levee, and diverts the same into said canals, and that the plaintiffs, at and before the time of the commencement of the construction of the said levee, knew of the purposes thereof, and approved the same and knew of the beginning and prose-
781 cution of the construction thereof, and consented to and approved of such construction. That said canals and levee were constructed at great expense, and because of and in reliance upon the said approval and consent of the plaintiffs, and but for such approval and consent would not have been constructed.

70.

That, throughout Buena Vista Swamp, there is a surface stratum of decomposed vegetable loam, varying in depth from one to five feet, and underlying this
782 surface stratum is a bed of sand. That interspersed throughout said swamp there are innumerable holes or depressions, from a few inches to some twelve or fifteen feet deep. That owing to the nature of the subsoil and the character of the country, water from Kern River and Buena Vista Lake percolates and seeps through to and rises in these holes or depressions, and at times spreads or flows from one to another, but in no continuous channel or defined course. That by such percolation and seepage the lands in said swamp are naturally irrigated and moistened.

783 71.

That from the point where New River enters Buena Vista Slough, a channel extends southerly into Buena Vista Lake, as shown upon the map hereunto annexed. That from said point where said river enters said slough to and into Buena Vista Swamp as far north as Section Twenty-four (24), Township Twenty-nine (29) south, Range Twenty-three (23) east, there is a traceable, but in places detached channel (shown on the annexed map, and thereon designated as Buena Vista Slough) of varying width and depth. That from the

784 river northerly to said swamp, said channel is well defined, but after reaching said swamp to its northern extremity in said Section Twenty-four (24), said channel is not well defined nor continuous, and is not a defined natural channel with bed and banks, but consists more of a series of holes than a regular waterway. That said channel terminates in and is not traceable beyond said Section Twenty-four (24). That whatever waters have gotten down into said swamp without the aid of the artificial obstructions in these findings mentioned, before reaching any of said lands of plaintiffs, have not been confined to said channel, 785 but have spread generally and indefinitely over said swamp, and that said waters do not constitute a regular flowing stream or water-course, but consist, in addition to the seepage and percolation in these findings mentioned, of occasional bursts of water which, in times of freshets or melting snow, overflow the banks of the river above, or flow out of Buena Vista and Kern Lakes after having been stationary therein, and inundate the whole of said swamp as far northward as the water reaches. That said swamp, though sloping slightly toward the north, is generally flat and level, and though interspersed throughout the same, there are channels, 786 hollows and depressions, either natural or made in part by the action of the floods and waters, such channels, hollows and depressions have no continuity or connection one with another, and are found running in all directions and generally throughout said swamps. That whatever flow or movement said waters have or ever had, is not and never was usual or accustomed, but is and was only occasional and sluggish, and in no manner confined to said channels, hollows or depressions.

72.

787 That the portion of Buena Vista Slough from New River to Buena Vista Swamp, though continuous and well defined, is in places shallow and does not constitute a water-course, and the waters which ~~form~~ from the overflows, elsewhere in these findings mentioned, reach said swamp over the surface of the country; are not confined to the bed and banks of said slough, but spread and flow as well over the adjacent country as through the slough itself; and that such flow is not usual, definite, or accustomed, as is, nor does it correspond with that of the waters in, Kern River before

788 reaching Buena Vista and Kern Lakes, but is only occasional, as is in these findings elsewere described. That the slough or channel marked on the annexed maps as Buena Vista Slough is as far northward as, and until reaching Buena Vista Swamp, known as and called, Buena Vista Slough; but after reaching said swamp and ceasing to be well defined or continuous, as in these findings set forth, it ceases to be distinguished as Buena Vista Slough, and the term Buena Vista Slough is then applied to and used to designate the whole of said swamp, and not any particular channel therein.

789

73.

That the use to which the water diverted by the defendant was applied was to supply a natural want, and the quantity taken was necessary and reasonable.

74.

That on the lands irrigated by the Calloway Canal irrigation is a natural want, and that defendant took no more of the waters of Kern River than was necessary and reasonable.

790

75.

That Kern River is not, throughout its whole course down to Buena Vista and Kern Lakes, a perrennial stream, nor during the period of its flow are the waters therein flowing uniform or constant in amount or volume, but the volume and amount of said waters vary and are subject to great and sudden fluctuations. That generally the irrigation season along Kern River is from February to July. That usually during said irrigation season there is ample and abundant water flowing down said river, not only to fill the aforemen-
791 tioned canals and ditches heading on said river—including that of defendant—and furnish and supply to them sufficient water to irrigate the lands by them irrigated, as in these findings stated, but also to flow to said Buena Vista Slough, and since the construction of the dam and Levee at Cole's Crossing, and the turning of the waters there reaching northward, as in these findings mentioned, to wet up and thoroughly irrigate all the lands in Buena Vista Swamp, and supply water thereon for all useful and needful purposes.

792 76.

That during the irrigation season of the year the amount of water diverted from Kern River by defendant is not sufficient to materially effect or substantially diminish the volume or amount of water usually reaching Buena Vista Slough; and that during the balance of the year none of the water by defendant diverted would, if not so diverted, ever, in its natural flow, flow to or reach the said lands of plaintiffs, or any part thereof.

77.

793 That the period from July, 1878, to the commencement of this action, was one of unusual scarcity of water throughout the whole course of Kern River; and that during said period none of the waters by defendant diverted would naturally have flowed to or reached said lands of the plaintiffs if not so obstructed.

78.

That Buena Vista Slough is on the extreme western side of the valley, lying between the Sierra Nevada
794 and the Coast Range of Mountains. That immediately west and near by said slough the foot-hills of said Coast Range begin to rise. That from the point where Kern River enters the plains on the east, clear across to said foot-hills, is a ridge or stretch of high land, dividing the basin of Kern and Buena Vista Lakes from the basin or trough occupied by Buena Vista Swamp and Tulare Lake. That the slope of said ridge is greater and more precipitous southward, towards Kern and Buena Vista Lakes, than it is northwards, or towards Buena Vista Swamp and Tulare Lake. That from said point where the river enters the plains it fol-
795 lows generally along the crest of said ridge, bearing, however, southward, and keeping on the southern slope thereof to Buena Vista Slough, through which, since the formation of New River, and until prevented by the artificial obstructions at Cole's Crossing, it emptied its waters there reaching into Buena Vista and Kern Lakes. That said ridge extends across Buena Vista Slough, at a point north of where New River enters said slough, and south of Buena Vista Swamp; and, until the construction of the aforesaid obstructions at Cole's Crossing has prevented any of the waters of Kern River, or of Buena Vista and Kern Lakes, from

796 flowing northward to Buena Vista Swamp, except in the occasions of overflow in these findings mentioned.

79.

That from the overflows in these findings mentioned, the water which has reached Buena Vista Swamp has, until obstructed by the works of the Kern Valley Water Company, in findings numbers 71 and 72, mentioned, flowed to the uppermost or southern body of plaintiffs' said lands, and extended northward over said swamp to a greater or less distance
797 towards Tulare Lake, according to the fall of rain and snow, and without any regularity or certainty; but, for more than ten (10) years next preceding the commencement of this action, none of said water has flowed to Tulare Lake, save and except that in exceptional and rarely recurring years of excessive and unusual rain and snow, a portion of said water has flowed to and into said Tulare Lake, following, however, no defined channel over said swamp, but generally spreading throughout the same and not constituting a water-course or regular flowing stream. That the waters which from said overflows reach said swamp, except
798 such surplus portion thereof as passes to Tulare Lake, remain on said swamp for a great length of time. That the overflows and the seepage and percolation in these findings mentioned, did prior to September 28th, 1850, cause said lands within said swamp to be swamp and overflowed lands, and said lands had become and were on said 28th day of September, 1850, swamp and overflowed lands, and as such were granted to the State of California by Act of Congress, approved September 28th, 1850.

799 80.

That in August, 1878, plaintiffs began to cultivate and thenceforth hitherto have cultivated the west half of Section Ten (10) in Township Thirty (30) South, Range Twenty-four (24) East, Mount Diablo Base and Meridian, and since the dates of their said patents, plaintiffs have pastured their cattle over the lands described therein. But otherwise than in this finding stated plaintiffs have not put said lands to any use or taken or had possession thereof.

And as conclusions of law I find:

800 1.

That Kern River, the diversion of the waters of which is alleged to be a nuisance, so far as it can be considered a water-course, terminates at and in Buena Vista and Kern Lakes.

From the said lakes to the lands of the plaintiffs there is no water-course, and that defendant has not diverted any water which ought to have run or flowed, or before such diversion did run or flow, or but for said diversion would have run or flowed, to, along, by, through, over, or upon any of the said lands of the
801 plaintiffs.

2.

That even if the waters in question could be deemed a water-course extending from the Sierra Nevada Mountains to Tulare Lake and below, this action cannot be maintained, because it does not appear that the plaintiffs' lands embrace what would then have to be considered the banks or sides of said supposed water course or any part of such banks or sides. But, on that hypothesis, the United States would be the owner of all the lands irrigated by and
802 through which pass the several canals or ditches hereinbefore mentioned and the whole bed of said supposed water-course, save and except only the said Buena Vista Swamp and of all the banks and sides thereof. And that by virtue of its said compliance with the laws of this State, and with the laws of Congress and the local laws, customs and decisions therein referred to, the defendant became the grantee of the United States as riparian owner as aforesaid of the waters, ways, rights and privileges by it appropriated and claimed as aforesaid and that the amount and manner of said appropriation was reasonable and proper and
803 did not exceed what the United States as riparian owner, or the defendant as the grantee and licensee of such riparian owner, had the right to divert and use in the manner and to the extent to which the defendant has diverted and used the same, and the amount of water so diverted and used would have been considered reasonable as between an upper and a lower proprietor.

3.

The plaintiffs did not have or acquire any possession, claim, right or title of, in or to the land de-

804 scribed in their complaint until sometime in the year 1876, as to a portion and later as to the rest of said lands, and the right of the defendant to the water claimed and diverted by it, vested and accrued in the month of May, A.D. 1875, and the patents put in evidence by the plaintiffs did not convey or grant to, or vest in them any right, title, interest or estate in or to said waters so claimed and diverted by the defendant.

4.

805 That plaintiffs have been guilty of such laches and neglect as disentitle them to any relief in this action.

5.

That by the acts and acquiesence of the plaintiffs as hereinbefore found in the doings of the Kern Valley Water Company, all claims and causes of action growing out of the diversion by the defendant, were before and at the time of the commencement of this action, lost and destroyed, and all riparian rights, if any plaintiffs had, thereby extinguished.

806

6.

The said diversion has not resulted in, and if continued will not occasion any loss, injury, detriment or damage to the plaintiffs, or to their lands.

7.

The defendant is entitled to a judgment that the complaint on the merits be dismissed and that the defendant recover its costs in this cause laid out and expended.

807 It is ordered that judgment herein be entered accordingly.

November 3, 1881.

B. BRUNDAGE,
Superior Judge.

Annexed to the said findings is a map marked "Exhibit A," and both are marked: Filed Nov. 3, 1881.

[Here insert said "Exhibit A."]

808 And thereafter on the 19th day of November, A.D. 1881, the said Court made and filed an order amending and correcting finding Number 11, of the findings theretofore in said cause filed, which said order was in the words and figures following:

In the Superior Court of Kern County, State of California.

809 CHAS. LUX et als., Plaintiffs,
vs.
J. B. HAGGIN et als., Defendants. } 214.

In this cause it appearing that by mistake and inadvertence, Finding Number 11 of the findings hereinbefore filed in this cause does not correctly set forth the facts intended to be found herein, and is consequently inconsistent with others of the findings herein; and whereas the said findings, except said Finding
810 Number 11, do correctly set forth the facts intended to be found by the Court herein.

Therefore, it is ordered that the said findings be amended and corrected as follows, to wit: That, in lieu and in stead of said Finding 11, as the same now appears on file herein, the following finding be substituted, to wit:

11.

"

That said New River diverges from Old River towards the right, but not northerly; after leaving Old River it runs southwesterly, and joins Buena Vista
811 Slough at or about Section Five (5), in Township Thirty-one (31) South, Range Twenty-five (25) East of Mount Diablo base and meridian, at the point known as Cole's Crossing, and so designated on the map hereto annexed, and flows thence to Buena Vista and Kern Lakes, and does not join Buena Vista Slough in or near Section Thirty (30), Township Thirty (30) South, Range Twenty-five (25) East, of Mount Diablo base and meridian, except that in times of high water a portion of its waters do flow through a shallow channel, (shown on the map to these findings annexed), and empty into said slough on or about said Section Thirty (30), and thence flows into Buena Vista and Kern Lakes. "

812 And it is further ordered, that the Clerk of this Court do file this order in said cause, and do annex a duly certified copy of this order to the said findings now on file herein. And it is further ordered, that the said Clerk do forthwith serve, or cause to be served, a duly certified copy of this order on the respective Attorneys of record of the plaintiffs and the defendants herein.

Signed in open Court, this 19th day of November, A. D. 1881.

B. BRUNDAGE,
Superior Judge.

813

And thereupon, on said 19th day of November, A. D. 1881, the Clerk of said Court did, in pursuance of said order, file the same in said cause, and did annex a duly certified copy thereof to the said findings theretofore on file in said cause; and the said Clerk did forthwith, and on the said 19th day of November, A. D. 1881, serve a duly certified copy of said order on the respective Attorneys of record of the plaintiffs and the defendant herein; and thereafter, and after the said filing, annex-
814 ing and service of said order, the plaintiffs, in due season, on the 12th day of December, A. D. 1881, gave notice of their intention to move for a new trial of said cause, stating generally the grounds of their motion.

And said plaintiffs specify the particular errors of law occurring at the trial on which they will rely.

1. The Court erred in permitting the witness James V. Rosemyer to testify on cross-examination as to the condition of Kern and Buena Vista Lakes during the
815 years 1864 and 1865, a period of time upon which the witness was not examined on his direct examination.

2. The Court erred in permitting the witness James V. Rosemyer to testify on cross-examination as to the condition of the water in Buena Vista Slough in 1859, when the said witness had not been examined as to the condition of said Buena Vista Slough on his direct examination.

3. The Court erred in permitting the witness James C. Crocker to testify on cross-examination as to whether

816 he had anything to do with building the canal con-
constructed by the Kern Valley Water Company.

4. The Court erred in refusing to permit the witness F. A. Tracy to testify on re-direct examination as to whether he could have gone through in a boat from Tracy's Crossing into the San Joaquin River.

5. The Court erred in permitting the witness Philo D. Jewett to testify on cross-examination to a conversation between the witness and Thomas Baker, as to the purpose of building the Baker dam, near the outlet of
817 Buena Vista Lake.

6. The Court erred in admitting in evidence the copy of the report made by B. S. Alexander, George Davidson and George H. Mendell, to James B. Haggin, dated November 16, 1877.

7. The Court erred in refusing to admit in evidence plaintiffs' Exhibits 29, 30, 31, 32, 33, 34, 35, 36 and 37, to show the relative dimensions of the objects they represent.

818 8. The Court erred in permitting the witness J. C. Crocker to testify on cross-examination as to his authority to act for Miller & Lux in regard to the lands in suit.

9. The Court erred in admitting in evidence the power of attorney from Miller & Lux to J. C. Crocker, dated August 22, 1876.

10. The Court erred in permitting the witness James Dixon to testify as to his filing and posting a notice of appropriation of water from Kern River through Gage Slough.
819

11. The Court erred in refusing to strike out the following answer given by said witness James Dixon: "I posted a notice of appropriation."

12. The Court erred in permitting the witness James Dixon to testify as to a change of the point of diversion of water from Gage Slough to the north bank of Kern River.

13. The Court erred in permitting the witness James Dixon to testify as to the contents of the notice

820 of appropriation of water from Kern River, posted by said witness on Gage Slough.

14. The Court erred in admitting in evidence the copy of the notice of appropriation of water from Kern River, signed by E. V. Joyce and J. Dixon, and dated May 25, 1873, as recorded in the Book of Water Rights of Kern County.

15. The Court erred in permitting the witness, James Dixon, to testify as to the filing, posting, and the contents of a notice of appropriation of water from Kern
821 River by the James & Dixon Canal.

16. The Court erred in admitting in evidence a copy of the notice of appropriation of water from Kern River, signed by James Dixon and others, and dated April 29, 1873, as recorded in the Book of Water Rights of Kern County.

17. The Court erred in permitting the witness, James Dixon, to testify as to the contents of a notice of appropriation of water from Kern River, by the Pioneer Canal.

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18. The Court erred in admitting in evidence the copy of the notice of appropriation of water from Kern River signed by Uriah Groshang and others, dated April 26, 1873, as recorded in the Book of Water Rights of Kern County.

19. The Court erred in admitting in evidence the copy of notice of appropriation of water from Kern River, dated August 7, 1875, marked Defendant's Exhibit G.

823 20. The Court erred in admitting in evidence the coy of the notice of appropriation of water from Kern River, dated August 7, 1875, as recorded in the Book of Water Rights of Kern County.

20*a*. The Court erred in striking out the testimony of J. C. Crocker, as to the time when he bought the land described in the amended complaint, and went into possession of it.

21. The Court erred in refusing to permit plaintiffs' counsel to examine the witness, Walter James, as to

824 his qualification as an expert to testify to the effect of the levee at Cole's Bridge upon the water flowing down Kern River into Buena Vista Slough.

22. The Court erred in admitting in evidence the report of N. R. Wilkinson and William McFarland to the Board of Supervisors of Kern County, dated March 21, 1876.

23. The Court erred in permitting the defendants to withdraw the report of N. R. Wilkinson and William McFarland to the Board of Supervisors of Kern Coun-
825 ty, dated March 21. 1876, after the said report had been admitted in evidence.

24. The Court erred in permitting the witness, R. L. Dixon, to testify to taking water through other ditches than those of the defendant, the Kern River Land and Canal Company.

25. The Court erred in permitting the witness, W. H. Souther, to testify as to the condition of the dam and levee on Buena Vista Slough.

826 26. The Court erred in permitting defendants' Map I to be shown to the witness, William Souther, and permitting him to testify as to certain localities from said map, before the correctness of said map had been proved.

27. The Court erred in permitting the witness, Frank P. May, to testify as to the posting and the contents of the notice of appropriation of water from Kern River by the Farmers' Ditch or Canal, and as to the construction of said ditch.

827 28. The Court erred in permitting the witness, John O'Miller, to testify as to the construction of and diversion of water through the Railroad Ditch from Kern River.

29. The Court erred in permitting the witness, C. L. Conner, to answer the following question:

"Q—Do you find that by the using of the ditch " there, there is any saving in the waste of water?"

30. The Court erred in permitting the witness, J. D. Schuyler, to testify as to estimates of the annual evap-

828 oration of Kern and Buena Vista Lakes, based upon actual experiments.

31. The Court erred in refusing to strike out the answer given by the witness Schuyler to the question as to the data used by him in ascertaining the evaporation of Kern and Buena Vista Lakes.

32. The Court erred in permitting the witness, Peter O'Hara, to testify as to the posting and the contents of the notice of appropriation of water from Kern River by the Buena Vista Canal.

829

33. The Court erred in permitting the record of water claim of Buena Vista Ditch to be shown to the witness O'Hara to refresh his recollection.

34. The Court erred in admitting in evidence the recorded notice of the Buena Vista Ditch, signed by T. W. Barnes and others, and dated July 15, 1870.

35. The Court erred in permitting the notice of water right, signed by W. G. Swinney and others, and dated February 2, 1873, to be shown to the witness,
830 J. J. Darnul, to refresh his recollection.

36. The Court erred in admitting in evidence the notice of appropriation of water from Kern River by the Beardsley Canal, dated December 2, 1873, and signed W. G. Swinney and others.

37. The Court erred in admitting in evidence the copy of the notice of appropriation of water from Kern River, dated February 2, 1873, and signed by W. G. Swinney and others, as the same was recorded in Book
831 of Water Rights of Kern County.

38. The Court erred in permitting the witness J. J. Darnul to testify as to any complaints made in 1879 as to the diversion of water from Kern River by other ditches than that of the Kern River Land and Canal Company.

39. The Court erred in permitting the witness J. J. Darnul to testify as to any complaints made by Mr. Canfield, as President of the Buena Vista Ditch, in 1879, as to diversion of water from Kern River.

832 40. The Court erred in permitting the witness Randall Meacham to testify as to the contents of a notice of appropriation of water from Kern River, signed by Zion Wilson and A. Meacham.

41. The Court erred in permitting the copy of notice of water claim of Wilson and Meacham to be shown to the witness Meacham, to refresh his recollection.

42. The Court erred in admitting in evidence the copy of notice of appropriation of water from Kern
833 River, signed by Zion Wilson and A. Meacham, recorded in the Book of Water Rights of Kern County.

43. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, United States Signal Observer, for the month of January, 1879.

44. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, United States Signal Observer, for the month of February, 1879.

834

45. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, United States Signal Observer, for the month of March, 1879.

46. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, United States Signal Observer, for the month of April, 1879.

47. The Court erred in admitting in evidence the
835 record of observations made at Visalia by J. C. Cochrane, United States Signal Observer, for the month of May, 1879.

48. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of June, 1879.

49. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of July, 1879.

836 50. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, U. S. Signal Observer, for the month of August, 1879.

51. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of September, 1879.

52. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Coch-
837 rane, U. S. Signal Observer, for the month of October, 1879.

53. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of November, 1879.

54. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of December, 1879.

838

55. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of January, 1880.

56. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of February, 1880.

57. The Court erred in admitting in evidence the
839 record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of March, 1880.

58. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of April, 1880.

59. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of May, 1880.

840 60. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of June, 1880.

61. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of July, 1880.

62. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Coch-
841 rane, U. S. Signal Observer for the month of August, 1880.

63. The Court erred in admitting in evidence the record of observations made at Visalia, by J. C. Cochrane, U. S. Signal Observer, for the month of September, 1880.

64. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, U. S. Signal Observer, for the month of October, 1880.

842

65. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, U. S. Signal Observer, for the month of November, 1880.

66. The Court erred in admitting in evidence the record of observations made at Visalia by J. C. Cochrane, U. S. Signal Observer, for the month of December, 1880.

67. The Court erred in permitting the witness J. C.
843 Cochrane to testify as to the items contained in the record of observations of the U. S. Signal Officer at Visalia for the month of September, 1879.

68. The Court erred in permitting the record of water claim made by W. P. McCord and others to be shown to the witness W. P. McCord, to refresh his recollection.

69. The Court erred in admitting in evidence the copy of notice of appropriation of water from Kern River, signed by W. P. McCord, and dated March 20,

844 1875, recorded in Book of Water Rights of Kern County.

70. The Court erred in permitting the witness W. P. McCord to testify as to the contents of the notice of appropriation of water from Kern River by the Calloway Canal, and to an attempt on the part of Calloway and others to appropriate the water of Kern River.

71. The Court erred in permitting the record of observations of the reading of the thermometer taken at Belle View Ranch to be shown to witness Crusoe to
845 refresh his memory.

72. The Court erred in permitting the witness A. C. Maude to testify as to the posting of a notice of appropriation of water from Kern River by the Calloway Canal.

73. The Court erred in admitting in evidence the notice of appropriation of water from Kern River, signed by W. H. Baxter and others, and dated May 4, 1875.

846 74. The Court erred in admitting in evidence the affidavit of O. P. Calloway, made May 4, 1875, attached to the notice of appropriation of W. H. Baxter and others.

75. The Court erred in refusing to permit the witness L. L. Dixon to answer the following question: "Q—What was indicated by the gauge at the different times you were there?"

76. The Court erred in permitting the witness S. H. Anderson to testify as to the posting and the con-
847 tents of the notice of appropriation of water from Kern River by the Calloway Canal.

77. The Court erred in permitting the witness William McFarland to testify as to the posting and the contents of the notice of appropriation of water from Kern River by the Calloway Canal.

78. The Court erred in permitting the defendant to offer in evidence the record of the notice of appropriation of water from Kern River by the Calloway Canal as the same is recorded in the Book of Water Rights of Kern County.

848 79. The Court erred in permitting the defendant to offer in evidence the affidavit of O. P. Calloway attached to the notice of appropriation of water from Kern River by the Calloway Canal as the same as recorded in the Book of Water Rights of Kern County.

80. The Court erred in permitting the witness Charles Lux to testify as to the existence of a power of attorney from Henry Miller to Charles Lux in the year 1875.

81. The Court erred in permitting the record of
849 notice of appropriation of water of Kern River to be shown to the witness Charles G. Jackson to refresh his memory.

82. The Court erred in permitting the witness Charles G. Jackson to testify as to the contents of the copy of the notice of appropriation of water from Kern River by the Calloway Canal as recorded in the Book of Water Rights of Kern County.

83. The Court erred in permitting the witness F. H. Colton to testify as to his connection with and work
850 performed on the Kern Island Irrigating Canal Company.

84. The Court erred in permitting the witness G. W. Parrish to answer the following question :

"Q—Do you know whether there was ever any "notice of appropriation of the water for that ditch "(Parrish & Wilson) posted?"

85. The Court erred in permitting the witness H. A. Reading to answer the following question :

"Q—Mr. Reading, through that portion of this
851 "swamp and overflowed lands which you went was or "was there not any continuous channel?"

86. The Court erred in permitting the witness H. A. Reading to testify as to the condition and quality of lands along Buena Vista Slough.

87. The Court erred in permitting the witness, J. D. Schuyler, to answer the following question:

"Q—I will ask you now whether there is a contin-"uous, defined channel through that swamp land dis-"trict?"

852 88. The Court erred in permitting the witness, Walter James, to testify as to the production of crops on lands irrigated by the Calloway Canal.

89. The Court erred in permitting the witness, Walter James, to answer the following question:

"Q—What would be the effect on these crops, of "whatever sort they may be on these lands, if you "ceased putting water upon them?"

90. The Court erred in permitting the witness, Walter James, to answer the following question:

853 "Q—Do you know, Mr. James, approximately, the "cost of that canal?"

91. The Court erred in permitting the witness, Walter James, to testify as to the location of and work performed on the Farmers' Canal.

92. The Court erred in permitting the witness, Walter James, to answer the following question:

"Q—You say 100 cubic feet, I mean 100 feet under "a 4-inch pressure, what would that be, Mr. James, in "inches, under a 4-inch pressure?"

854 93. The Court erred in permitting the witness, James, to testify as to what land was irrigated by the Farmers' Canal.

94. The Court erred in admitting evidence in relation to the Castro Ditch and its construction.

95. The Court erred in permitting the witness, Walter James, to testify as to the acreage of land irrigated by the Stine Canal.

855 96. The Court erred in permitting the witness, Walter James, to answer the following question:

"Q—To get the desired amount of water down there, "or the amount of water that was formerly used, that "you saw down there in 1872-3-4, whichever it was, "before the construction of this canal, would there be "any difference in the amount which would then have "to have been turned in there from the river, beyond "the amount which now has to get it to the same "place?"

97. The Court erred in permitting the witness, Walter James, to testify as to the posting or the con-

856 tents of the notice of appropriation of water from Kern River by the James Ditch or Canal, and as to its construction.

98. The Court erred in permitting the witness, Walter James, to testify as to the correctness of the recorded copy of the notice of appropriation of water from Kern River by the James Ditch, as recorded in the Book of Water Rights of Kern County, and in permitting such record to be shown to the witness to refresh his memory.

857 99. The Court erred in admitting in evidence the record of the notice of appropriation of water from Kern River by the James Ditch.

100. The Court erred in permitting the witness, Walter James, to testify as to the acreage of lands irrigated by the James Ditch.

101. The Court erred in permitting the witness, Walter James, to testify as to the acreage of lands subject to be irrigated from the Plunkett Canal.

858 102. The Court erred in permitting the witness, Walter James, to testify as to the acreage of lands subject to be irrigated from the Meacham Ditch.

103. The Court erred in permitting the witness, Walter James, to testify as to the acreage of lands subject to be irrigated from the Pioneer Ditch.

104. The Court erred in permitting the witness, Walter James, to testify as to the acreage of lands subject to be irrigated from the James & Dixon Canal, and Johnson Canal.

859 105. The Court erred in permitting the witness, Walter James, to testify as to the existence of May's Ditch.

106. The Court erred in permitting the record of notice of the Pioneer Ditch water appropriation being shown to the witness, Walter James, to refresh his memory.

107. The Court erred in permitting the witness, Walter James, to testify as to the correctnes of the re-

860 corded copy of notice of appropriation of water from Kern River by the Pioneer Ditch, as recorded in the Books of Water Rights of Kern County.

108. The Court erred in permitting the witness, W. R. MacMurdo, to answer the following question :

" Q—Now, from your observation of that country, your knowledge of it, what would have been the flow of the water of New River if this levee had never been constructed there at Cole's Bridge; the levee, dam, weir, or whatever this artificial obstruction may be?"

861

109. The Court erred in admitting in evidence the copy of Sampson's Records, defendant's Exhibit O.

110. The Court erred in admitting in evidence defendants "Exhibit P."

111. The Court erred in permitting the witness D. G. McLean to testify in relation to turning water into Goose Lake Slough, and thence into Wible Canal, for the benefit of the Kern Island Water Company, and answering the following question:

862 " Q—How did you happen to do that, Doctor?"

112. The Court erred in permitting the witness S. W. Wible to answer the follwing question:

"Mr. GARBER. Q—Did you, on the 6th day of May " or thereabouts, make that request of Dr. McLean, " the witness on the stand?"

113. The Court erred in permitting the witness, D. G. McLean to answer the following question:

" Q—What orders had you relative to the water of " your canal in the spring of 1879?"

863

114. The Court erred in admitting in evidence a deed from W. H. Baxter and others, the original locators of the Calloway Canal, to the Kern Land and Canal Company, dated May 18, 1875, conveying the water rights of said canal.

115. The Court erred in admitting in evidence a deed from J. B. Haggin to the Kern River Land and Canal Campany, dated June 16, 1880, for the north half and southwest quarter of the northwest quarter of Section Twenty-four (24) in Township Twenty-nine

(29) south, Range Twenty-seven (27) east, Mount Diablo Base and Meridian, situated in Kern County.

116. The Court erred in admitting in evidence the Articles of Incorporation of the Kern Valley Water Company, filed in the office of the County Clerk of Kern County, May 24, 1877.

117. The Court erred in permitting the witness W. B. Carr, to testify to a conversation had by the said witness with O. P. Calloway, in July, 1875, as to the construction of the canal of the Calloway Canal Com-
pany.

118. The Court erred in permitting the witness W. B. Carr to testify to a conversation had by the said witness with S. W. Wible in February, 1878, as to turning water into Goose Lake Slough, towards his camp.

119. The Court erred in permitting the witness W. B. Carr to testify to the cost of constructing the main canal and side ditches of the Calloway Canal.

120. The Court erred in refusing to strike out the testimony of George H. Mendell, founded on calculations and observations made at Visalia.

121. The Court erred in refusing to strike out the testimony of J. D. Schuyler, founded on calculations and observations made at Visalia.

122. The Court erred in refusing to strike out the calculations made by Col. Mendell, as to the amount of evaporation from Kern and Buena Vista Lakes.

123. The Court erred in refusing to strike out the data upon which Col. Mendell and J. D. Schuyler based their calculations.

124. The Court erred in refusing to permit the witness George W. Smith to answer the following question:

"Q—In running that, what was the nature of the "country through which you ran the two hundred and "six stations?"

125. The Court erred in refusing to permit the wit-

868 ness George W. Smith to answer the following question:

" Q—Now, let me ask you, in running a profile of " this kind whether it is usual, if you meet with a " slough, to express it on the profile?"

126 The Court erred in refusing to permit the witness George W. Smith to answer the following question:

" Q—What is the object of taking those stations " which are marked 'plus'?"

869 127. The Court erred in refusing to permit the witness George W. Smith to answer the following question:

" Q—Did you, at any point in running across that " line, come to or reach water? Did you cross any " water at all in running that level?"

128. The Court erred in striking out the answer given by the witness George W. Smith to the following question:

" Q—Did you come to a pond, and run around it in
870 " running that line?"

129. The Court erred in refusing to permit the witness George W. Smith to answer the following question:

" Q—Will you give the courses, distances and de- " viations running around the pond?"

130. The Court erred in refusing to permit the witness George W. Smith to answer the following question:

" Q—Then will you give the courses and distances
871 " around the pond?"

131. The Court erred in refusing to admit in evidence plaintiffs' Exhibit 41 with the word " slough " marked at Stations 70, 111, 118, 131, 132, 171, 188.

132. The Court erred in refusing to permit the witness George W. Smith to read his side-notes to refresh his memory, and to show facts noted by him opposite certain stations of his survey across the said swamp land.

872 133. The Court erred in refusing to permit plaintiffs to show by the witness George W. Smith, that at the pond which he found at Station 132 in making this survey, that he examined the pond, and found both an outlet and an inlet to the pond.

134. The Court erred in refusing to permit plaintiffs to prove by the witness E. T. Wright the same facts offered to be proved by the witness George W. Smith and ruled out by the Court.

873 135. The Court erred in refusing to permit the plaintiffs to prove, by the testimony of E. T. Wright, that in running levels across the swamp land, across where the depressions appear on defendants' Exhibit 41, he found well defined channels, and followed them north and south, and that they were continuous and did not run out.

136. The Court erred in refusing to permit the plaintiffs to prove, by the testimony of E. T. Wright, that he and George W. Smith had made a cross-section of the De Webber Road at Buena Vista Slough, and
874 the result of such cross-sectioning as to depth and width of the channel at that point.

137. The Court erred in refusing to permit the plaintiffs to prove by the testimony of George W. Smith that he and E. T. Wright had made a cross-section of the DeWebber Road at Buena Vista Slough, and the result of such cross-sectioning as to depth and width of the channel at that point.

138. The Court erred in refusing to permit plaintiffs
875 to prove by the witness Seth Smith the same state of facts as to what he found in running the level line across the swamp land, and also as to what he found in cross-sectioning the slough near Bonestell's and on the DeWebber Road.

139. The Court erred in refusing to permit F. P. McCray to testify as to survey and meander lines run by him around a pond opposite Station 132 on the line of levels run by said McCray across the body of swamp land lying between Buena Vista Lake and Tulare Lake.

876 140. The Court erred in striking out the answer of witness McCray to the following question:

"Q—Now, I will ask you what you found; what was "between Stations 131 and 133?"

141. The Court erred in refusing to permit plaintiffs to show by the witness McCray that he found between Station 131 and 133 a slough and the nature of the banks of the slough where the level line crossed it, and that said witness followed that slough both ways and found a continuous channel.

877 142. The Court erred in refusing to permit the witness McCray to testify as to the depth and width of Buena Vista Slough where the DeWebber Road crossed the said slough.

143. The Court erred in refusing to permit plaintiffs to show by the witness McCray that he had run lines across the body of swamp land at every point where the witnesses of defendant testify to having crossed said land, and to show what he found on such lines, and that if he found sloughs he measured the width and depth of such sloughs, and what the width
878 and depth of such sloughs were.

144. The Court erred in refusing to permit plaintiffs to show by the witness McCray that he had run lines on each side of the lines which defendant's witnesses testified to crossing the sloughs, and from one-half to three-quarters of a mile from such lines, and that he had examined the land between said lines as to its natural features and sloughs, and in case he found sloughs, the width, depth and length of such slough.

145. The Court erred in refusing to permit the wit-
879 ness McCray to testify that he had been in a boat on Buena Vista Slough from Norton's camp, Section 15, down to Bonestell's house, and as to the width of the stream during that trip, and particularly at those points where defendant's witnesses claimed there was no depth, and the depth of the channel where they claimed it was not well defined.

146. The Court erred in refusing to permit the witness R. T. Harrold to testify to what he found in going over the course of the survey made by T. R. Fillebrown, W. R. MacMurdo, on Buena Vista Slough.

880 147. The Court erred in refusing to permit the witness R. T. Harrold to testify to his accompanying F. P. McCray when he ran the lines across the different points in Buena Vista Slough where the witnesses testified they went, and also on the side lines—one-half or three-quarters of a mile on each side of them—and that he also accompanied Mr. McCray when he ran along any channels, or water or sloughs that they may have found on those lines between those points.

148. The Court erred in refusing to permit the witness W. P. Estes to answer the following question:
881 "Q—What did you see when making that crossing "there with those parties, as regards sloughs or "channels?"

149. The Court erred in refusing to permit the witness W. P. Estes to testify to the existence of water running in a channel or slough at a point $3\frac{1}{2}$ or 4 miles north of the Tule House.

150. The Court erred in refusing to permit plaintiffs to prove by the witnesses W. P. Estes, J. H. Huntley, John Beard, A. Noble, T. A. Stoutenburgh,
882 John Sturgeon and Robert Burgan, the condition of Buena Vista Slough at the different points where the defendant's witnesses testified they went, and on the lines there run by Mr. McCray, and the side lines, one-half or three-quarters of a mile on each side of them; and to prove the existence of any channels, or water or sloughs they may have found on those lines between those points.

151. The Court erred in refusing to permit the plaintiffs to prove by the testimony of John Beard and J. H. Huntley that they accompanied Mr. McCray on
883 the trips he made down Buena Vista Slough in a boat from Head-quarters to Bonestell's house, and to show what they found as to depth and width of that channel on that trip.

152. The Court erred in refusing to permit witness S. W. Wible to answer the following question: "Q—What effect has that sediment or sand which "flows through that lower break upon the channel "running there, Buena Vista Slough, or upon the "channels running through the swamp land?"

884 153. The Court erred in refusing to permit the witness, S. W. Wible to answer the following question.
"Q—What effect has that sand, if any, upon the channel at a point below your head-quarters?"

154. The Court erred in striking out the answer given by the witness Thomas N. Will, that Thornton, Taylor, McClung, McLean, Murray and Reading had turned back after going into the swamp nearly a mile, because they came to a slough?

155. The Court erred in refusing to permit the
885 witness Thomas N. Will, to answer the following question.
"Q—In going out there did you take them across
" any sloughs?"

156. The Court erred in refusing to permit the witness Nellie A. Barker, to testify to the record of gauge readings made by her, of the water flowing in Kern River, by the Rio Bravo Ranch, in Kern County, between the 23d of March, 1879, and the 1st day of June, 1881.

886 157. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Lottie Barker, the record of the guage readings made by her of the water flowing in Kern River, by the Rio Bravo Ranch, in Kern County, between the 23d day of March, 1879, and the 1st day of June, 1881.

158. The Court erred in refusing to permit the witness S. M. Judd, to answer the following question.
"Q—Did you at any time during 1879, see a wing dam thrown across the river there, throwing all the water flowing in Kern River into the Calloway Canal?"

887 159. The Court erred in refusing to permit the plaintiffs to prove by S. M. Judd, John Garlick and G. K. Ober that in the year 1879 a wing dam was thrown across Kern River, at the head of the Calloway Canal. That through all of the water running in Kern River into the Calloway Canal, so that no water ran below.

160. The Court erred in refusing to permit the witness John Morter to testify that in July, 1880, he crossed the Calloway Canal, and that it was full and swimming, and that he continued on down across the Kern River at

888 his house below the Pioneer Bridge, and that there was no water under the Pioneer Bridge at all.

161. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 43.

162. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 44.

163. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 45.

164. The Court erred in refusing to admit in evidence
889 Plaintiffs' Exhibit 46.

165. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 47.

166. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 48.

167. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 49.

168. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 50.

890 169. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 51.

170. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 52.

171. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 53.

172. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 54.

173. The Court erred in refusing to admit in evidence
891 Plaintiffs' Exhibit 55.

174. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 56.

175. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 57.

176. The Court erred in refusing to admit in e Plaintiffs' Exhibit 58.

177. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 59.

892 178. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 60.

179. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 61.

180. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 62.

181. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 63.

182. The Court erred in refusing to admit in evidence
893 Plaintiffs' Exhibit 64.

183. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 65.

184. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 66.

185. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 67.

186. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 68.

894 187. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 69.

188. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 70.

189. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 71.

190. The Court erred in refusing to admit in evidence Plaintiffs' Exhibit 72.

191. The Court erred in refusing to permit the plain-
895 tiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action, and ever since, J. B. Haggin and William B. Carr owned the majority or nearly all of the stock of the Pioneer Canal Company, and controlled the said company.

191 *a*. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action, and ever since, J. B. Haggin and William B. Carr owned the

majority or nearly all of the stock of the Stine Canal Company, and controlled the said Company.

192. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action, and ever since, J. B. Haggin and William B. Carr owned the majority or nearly all of the stock of the Buena Vista Canal Company, and controlled the said company.

193. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action, and ever since, J. B. Haggin and William B. Carr owned the majority or nearly all of the stock of the Kern Island Irrigating Canal Company, and controlled the said company.

194. The Court erred in refusing to permit plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action and ever since, J. B. Haggin and William B. Carr owned the majority or nearly all of the stock of the Farmers' Canal Company, and controlled said company.

195. The Court erred in refusing to permit the plaintiff to prove by the testimony of Celsus Brower that at the time of the commencement of this action and ever since, J. B. Haggin and W. B. Carr owned the majority or nearly all of the stock of the Gates Canal Company, and controlled said company.

196. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at at the time of the commencement of this action and ever since, J. B. Haggin and W. B. Carr owned the majority or nearly all of the stock of the James Canal Company, and controlled said Company.

197. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action and ever since, J. B. Haggin and William B. Carr owned the majority or nearly all of the stock of the Plunket Canal Company, and controlled said Company.

198. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action and ever

900 since, J. B. Haggin and W. B. Carr owned the majority or nearly all of the stock of the James and Dixon Canal Company, and controlled said Company.

199. The Court erred in refusing to permit the plaintiffs to prove by the testimony of Celsus Brower that at the time of the commencement of this action and ever since, J. B. Haggin and W. B. Carr owned the majority or nearly all of the stock of the Joyce Canal Company, and controlled said Company.

200. The Court erred in refusing to permit the wit-
901 ness J. D. Schuyler to testify as to the measurement made by him of amount of water flowing in Kern River at the Rio Bravo Ranch, on May 18, 1881.

201. The Court erred in refusing to permit the witness J. D. Schuyler to testify as to the amount of water running in Kern River during the years 1879, 1880 and 1881.

202. The Court erred in refusing to admit in evidence the record kept by L. L. Dixon, of the statistics of irrigators, irrigating lands from the Beardsley Canal.

902 203. The Court erred in refusing to admit in evidence the record kept by L. L. Dixon, of the statistics of irrigators irrigating lands from each of the following named canals, to wit: The McCord Canal, the Calloway Canal the McCaffrey Canal, the Emory Canal, the Jones and Tuckey Ditch, the Railroad Goose Lake and Wible Canals, the Pioneer Canal, the James & Dixon Canal, the Johnson Canal, the Dixon & Joice Canal, the Kern Valley Water Company's Canal, the Kern Island Canal, the South Fork Canal, the Cotton Ranch Canal, the Farmers' Canal, the Fish & Ablo, or Spanish Canal, the Baker &
903 Noble and Gates Canals, the Stine Canal, the Buena Vista Canal, the James Canal, the Meacham Canal, the Wilson Canal.

204. The Court erred in refusing to permit the witness, L. L. Dixon to testify as to the names of irrigators irrigating lands from water from the McCord Canal.

205. The Court erred in refusing to permit the witness L. L. Dixon to testify as to the names of irrigators irrigating lands from water taken from each of the following named canals: The McCord, the Calloway, the

904 McCaffrey, the Goose Lake, Railroad and Wible, the Pioneer, the Dixon & James, the Johnson, the Dixon & Joice, the Kern Valley Water Company, the Kern Island Canal, the South Fork Canal, the Cotton Ranch Canal, the Farmers' Canal, the Fish & Ablo Canal, the Stine Canal, the Buena Vista Canal, the James Canal, the Meacham Conal and the Wilson Canal.

206. The Court erred in refusing to permit the witness L. L. Dixon to testify, whether or not, he had at any time seen a wing dam across Kern River at the head of the Calloway Canal, which threw all the water of Kern
905 River into the Calloway Canal.

207. The Court erred in refusing to permit the witness Seth Smith to answer the following question:

Q—"If this chain was broken, could it be used for any " length of time for running levels by running the end of " it around the hand, and running the distances in that " way?"

And the plaintiffs specify the particulars in which the evidence is insufficient to justify the findings or decision

906 First. The evidence is insufficient to sustain or justify the finding, (2) that the lands described in the patents mentioned in Finding No. 1 were, until granted by the State of California, as set forth in said finding, the property of said State, and that the plaintiffs had not, prior to the issuance, of said patents any right, title, interest, claim, demand or possession, legal or equitable, in or to said land, or any part thereof in this:

It appears by the evidence that the plaintiffs, long prior to the issuance of said patents, had an equitable interest in and claim to said lands, and that the State of California held the same in trust for said plaintiffs; and that the
907 plaintiffs were, at the time said patents were issued, and for a long time prior thereto had been, in the actual possession of said lands, and of every part thereof.

Second. The evidence is insufficient to sustain or justify the finding; (2) that the lands mentioned in Finding No. 1 as having, by the decree in the case of People vs. Center et al., been adjudged and decreed to these plaintiffs, were, until the filing of the decree in said case of People vs. Center et al., the property of the State of California, and that said State was the owner thereof, and that plaintiffs had

908 not, prior to the filing of said decree, any right, title, interest, claim, demand or possession, legal or equitable, of, in or to said lands, or any portion thereof, in this:

It appears by the evidence that, long prior to the entry of said decree, the plaintiffs had an interest and claim in and to said lands, and that the plaintiffs were, at the time of the entry of said decree, and for a long time prior thereto had been, in the actual possession of said lands, and of every part thereof.

Third. The evidence is insufficient to sustain or justify the finding; (3) that the said lands of Plaintiffs are situ-
909 ated in and form part of the body of swamp and overflowed lands, designated in these findings, and on the map hereto annexed as Buena Vista Swamp but that said lands do not, nor does any part thereof border on Buena Vista Slough, nor are said lands or any part thereof situated along Buena Vista Slough, except that as is set forth in findings 18, 71 and 72 the channel of said slough is traceable through the west half of Section Ten (10,) and the northeast quarter of Section Five (5,) in Township Thirty (30) South, Range Twenty-four (24) East, and as far north as Section Twenty-four (24,) in Township
910 Twenty-nine (29) South, Range Twenty-three (23) East, Mount Diablo Base and Meridian, and that the said lands of plaintiffs are as shown on the annexed map situated in said Buena Vista Swamp to which the term Buena Vista Slough is sometimes applied, in this:

a. It appears by the evidence that the lands of plaintiffs, other than section 10, and the northeast quarter of Section 5, in Township 30 South, Range 24 East, are situated upon and border on Buena Vista Slough, and that the said slough is traceable through the whole body of lands known as the lands along Buena Vista Slough,
911 and designated upon the map annexed to the findings herein as Buena Vista Swamp.

b. It appears by the evidence that Buena Vista Slough is traceable all the distance from the point where Kern River discharges into said slough down through, and to the extreme northern boundary of plaintiffs' lands in amended complaint and in the findings herein described.

Fourth. The evidence is insufficient to sustain or justify the finding; (4) that except that that portion of Buena Vista Slough from where New River enters it, to

912 Buena Vista Lake, has from the time of formation of said New River to said slough been a part of said New River said Buena Vista Slough has not, from time immemorial, or for any time, or at all, been a part of Kern River, or of any natural stream or water course, in this:

It appears by the evidence that Buena Vista Slough has, from time immemorial, been a part of Kern River, and a natural stream and water course from the point where it leaves Buena Vista Lake, down through the body of swamp lands delineated upon the map annexed to the findings herein, and emptying into Tulare Lake.

913 Fifth. The evidence is insufficient to sustain or justify the finding (5), that the waters of Kern River have not, nor have any waters flowed to or through Buena Vista Slough, at any time or at all, except that, as stated in finding 4, that portion of Buena Vista Slough south of where New River enters it, has been a part of said New River from the time of the formation thereof to said slough, and except that, as stated in finding 9, the waters flowing down New River continued to and into Buena Vista Slough, and thence to and into Kern and Buena Vista Lakes, and that as stated in said finding 9,
914 and in findings 71 and 79, in times of overflow a portion of such overflow would extend northward over Buena Vista Sough to and over Buena Vista Swamp, and except that, as stated in finding 11, in times of high water a portion of the waters of New River flow through the shallow channel in said finding mentioned, to said slough, and thence to Buena Vista and Kern Lakes, and except as is stated in finding 12, and in findings 71 and 79, a portion of the overflow of Buena Vista and Kern Lakes would find its way northward along Buena Vista Swamp, and except that, as is stated in finding 67, the regular and natural flow of the
915 waters of New River into Buena Vista and Kern Lakes was interrupted by a dam thrown across said slough, and said waters were forced to flow northward along said slough to and over Buena Vista Swamp, until, as stated in said finding 67, said dam breaking, said waters resumed their natural flow to said lakes, and except that, as stated in finding 68, in the year 1877, by the reconstruction of said dam and the erection of other obstructions, the waters of New River were again turned northward along said slough to and into the canals of the Kern Valley Water Company, and

916 except that, as stated in finding 70, there is a certain percolation and seepage from said river and said lakes, by which said swamp is irrigated and moistened, and from which water at times rises therein and flows from one hole or depression to another, in this:

It appears by the evidence that, ever since the year 1868, the waters of Kern river have flowed through and emptied into Buena Vista Slough, through at times two and at times three separate channels, called and styled, respectively, the north channel, the middle channel, and the south channel; that all of the waters that ever, at
917 any time since the year 1866, flowed through the north channel into Buena Vista Slough, and also the waters that ran through the middle channel into Buena Vista Slough, after reaching said slough, ran northerly and down said slough, and through the lands of the plaintiffs, in the amended complaint and in the findings herein described, and did not at any time run southerly and into Buena Vista Lake; that the waters running in the southern channel of Kern River, and emptying into Buena Vista Lake, at times divided, a part running northward and down through the body of swamp lands, and a part running southward and emptying into Buena Vista
918 Lake; that after Buena Vista and Kern Lakes were filled to a level with the bed of Buena Vista Slough, then all of the waters running down Kern River, in all of its branches, would flow northerly and down through Buena Vista Slough, and that such was the course of the flow of the waters of Kern River prior to the construction of any levee or other works upon or across Buena Vista Slough.

Sixth. The evidence is insufficient to sustain or justify the finding (7), that the waters of Kern River, up to 1862, did not use to run southerly through said South Fork,
919 and thence northerly through Kern Lake, Buena Vista Lake (and the connecting channel between them) and Buena Vista Slough, into Tulare Lake. But that up to the Winter of 1861–2, the waters of Kern River used to run in part southerly through said South Fork to Kern Lake, and in part through Old River to Kern and Buena Vista Lakes, and did not run thence to or into Tulare Lake, or out of said Kern and Buena Vista Lakes, except as is stated in finding 12, in this:

It appears by the evidence that, up to the Winter of

920 1861–2, the waters of Kern River ran in part through the South Fork to Kern Lake, and in part through Old River into the connecting channel between Kern and Buena Vista Lakes, and that such waters of Kern River ran thence through said Kern and Buena Vista Lakes, and down through Buena Vista Slough, and into Tulare Lake.

Seventh: The evidence is insufficient to sustain or justify the finding (8): That in the winter of 1861-62, a flood closed the said South Fork at its head, but said flood did not, at the same time, open a new channel, but in the
921 winter of 1861-62 a flood closed the South Fork at its head, and thenceforth and until the winter of 1867-8 the natural flow of the waters of Kern River was down, to, into and through said Old River, except that in occasional times of extraordinary high water, some water would pass beyond the head of Old River, and following the course of the channel now known as "New River," down to a point in or about Section Thirty-one, (31) in Township Twenty-nine, (29), South of Range Twenty-seven, (27), East; Mount Diablo Base and Meridian, would there turn to the right, or Northward, and continue along the channel known as Goose Lake Slough, and so designated
922 on the map hereto annexed. That from the time when said flood took place, in the winter of 1861-2, until the winter of 1867-8, the said Old River was the main channel of Kern River, and, except as above stated, carried, and conveyed in their natural flow, all the waters of Kern River to, and into, Kern and Buena Vista Lakes, in this:

It appears by the evidence, that a portion of the waters of Kern River continued to run down to and through the South Fork after the flood of 1861-2, and up to the time of the flood of 1867-8, as the same had run prior to
923 the flood of 1861-2, and emptied into Kern Lake.

Eighth: The evidence is insufficient to sustain or justify the finding; (9), that from and after the flood of 1867-8 the waters flowing down New River, except such portion thereof as passed into Goose Lake Slough, continued on in their natural flow to and into Buena Vista Slough, and thence to and into Buena Vista and Kern lakes; but that in time of melting snow causing occasional and unusual freshets, and extraordinary high water, some water would overflow the banks of said river at or in the vicin-

924 ity of Buena Vista Slough, and a portion of such overflow would extend to and as far northward as it reached, spread from side to side over the aforesaid body of swamp and overflowed lands designated as Buena Vista Swamp, in this:

a. It appears by the evidence, that, after the flood of 1867-8, the waters flowing down New River continued on in their natural flow to and into Buena Vista Lake, through at times two, and at times three, separate channels, called, respectively, the northern, middle and southern channels; that all of the waters that flowed through
925 the northern and middle channels of said New River and into Buena Vista Slough, after reaching said slough, flowed northerly and down said slough, and that none of said waters ever flowed into Buena Vista or Kern lakes; that the waters flowing down the southern channel of said New River at times divided, a part running northerly down Buena Vista Slough and a part running southerly and into Buena Vista Lake, and at other times all of the waters running in said southern channel, ran into Buena Vista Lake; and that, after filling said Buena Vista and Kern lakes to the level of the channel of Buena Vista Slough, all of the waters of Kern River
926 would flow northward and down Buena Vista Slough.

b. It appears by the evidence that, except in times of extreme high water, the waters of said river running northward, after reaching the body of swamp and overflowed lands, along Buena Vista Slough, do not spread from side to side over the aforesaid body of Swamp and overflowed lands, except in times of extreme high water or floods, but that the said waters are confined, in great part, to the sloughs and channels running through said body of swamp and overflowed lands.

927 Ninth: The evidence is insufficient to sustain or justify the 11th finding in this:

a. It appears by the evidence that the waters of Kern River after leaving Old River and running into Buena Vista Slough, run in the manner specified in the last specification of error, and do not run in the manner specified in said 11th finding.

b. It appears by the evidence that the waters of Kern River usually and customarily flow in the middle channel that empties into Buena Vista Slough, and that such flow is not limited to times of high water.

928 Tenth. The evidence is insufficient to sustain or justsfy the finding (12): That, until the construction of the works of the Kern Valley Water Company in these findings mentioned, occasionally, in the Winter and Spring time of the year unusual freshets would cause Kern and Buena Vista Lakes to overflow, and a portion of such overflow would find its way northward along Buena Vista Slough and the adjacent country to and over said body of swamp and overflowed lands within which plaintiffs' said lands are situated, following, however, no defined course or channel but generally spreading from side to side throughout said swamp
929 as far northward as the water reached in this: It appears by the evidence that every year prior to the year 1877 the waters of the Kern River would cause Kern and Buena Vista Lakes to overflow, and tnat such overflow would find its way northward and along Buena Vista Slough; and, except in cases of extreme high water, would be mostly confined to the banks of said slough, and not spread from side to side through the body of swamp lands.

Eleventh. The evidence is insufficient to sustain or
930 justify the finding (13): That, except from the seepage and percolation and overflows in these findings mentioned, and from the effect of the artificial obstructions at Cole's Crossing in these findings described, none of the waters of the Kern River flow or ever have flowed to, along, by, through, over or upon the lands of plaintiffs or any part thereof in this: It appears by the evidence that Buena Vista Slough is a continuation of Kern River; and that all of the waters flowing down Kern River, except such as have been appropriated or diverted, or lost by evaporation or seepage, from time immemorial, have flowed to, along, by, through, over and
931 upon the lands of the plaintiffs, on their passage through said Buena Vista Slough.

Twelfth.—The evidence is insufficient to sustain or justify the finding (14): That except by being turned northward by the artificial obstructions at Cole's Crossing in these findings described, and by the overflows and the seepage and percolation in these findings mentioned, none of the waters of Kern River irrigate or ever have irrigated any of the said lands of plaintiffs; or make or ever have made said lands or any part

932 thereof fit for cultivation or pasture, or supply, or ever have supplied on said lands or any part thereof, water for stock or for agricultural or domestic purposes, or for all or any purposes for which an owner of land bordering on a running stream has a right to use the waters thereof, or for any purposes, in this: It appears by the evidence, from time immemorial and up to the time the artificial obstructions at Cole's crossing, referred to in said Fourteenth Finding, were constructed, the waters of Kern River, in their natural flow down Buena Vista Slough, irrigated the lands of plaintiff in
933 the amended complaint, and in the evidence herein described, and made the same fit for cultivation and pasturage, and supplied the said lands with water for stock, agricultural, domestic and other purposes; and that the waters of Kern River, until diverted by defendant and others, ran down through said Buena Vista Slough, and through, over and upon the lands of said plaintiffs.

Thirteenth. The evidence is insufficient to sustain or justify the finding (15): That the diversion, appropriation and consumption of the waters of Kern River
934 by the defendants has not prevented, or interfered with the natural flow of said waters or any part thereof to, or through said Buena Vista Slough at any point north of where New River enters it, or to, along, by, through, over, or upon the said lands of plaintiffs or any portion thereof; nor has it prevented or interfered with the irrigation of said lands, or any part thereof, or the making of the same fit for cultivation or pasture, or the supply thereon of water for stock or agriculture, or domestic, or other purposes, in this. It appears by the evidence that the diverson, appropriation and consumption of the waters of the Kern River by the de-
935 fendant has prevented and interfered with the natural flow of said waters and through Buena Vista Slough, and along, by, through, and over the lands of the plaintiffs in the amended complaint and findings herein described; and that such diversion, appropriation, and consumption has prevented and interfered with the irrigating of said lands and with making the same fit for cultivation, and has interfered with the supply of water formerly on said lands for stock, agricultural, domestic and other purposes.

936 Fourteenth—The evidence is insufficient to sustain or justify the finding (16).

That the changes in the course of Kern Kiver, in the preceding findings stated, have affected the supply of water to said Buena Vista Slough, and have diminished the supply of water to that portion of said slough north of where New River enters the same, and rendered less frequent the overflows in these findings mentioned. That the flood of 1867-8, in opening up the channel known as New River, carried down large quantities of earth, sand and other matter, and deposited the same
937 in and near Buena Vista Slough, north of Buena Vista Lake and south of Buena Vista Swamp, thereby filling up the slough at that point and enlarging the surface area and holding capacity of Kern and Buena Vista Lakes, and increasing the evaporation therefrom. That said waters of Kern River carry a great amount of sediment and sand, and that each year since said flood a portion of such sand and sediment, as well as brush and other matter brought down, has been deposited in and near Buena Vista Slough, thereby still increasing the said capacity of said lakes and rendering still less frequent the overflows in these findings mentioned.
938 That from the place where New River enters Buena Vista Slough, the waters of Kern River there flowing in their natural condition flow southward through said slough and into Buena Vista and Kern Lakes until said lakes are full, and when full, said lakes extend so far northward before overflowing as to embrace within their limits the junction of said river with said slough—in this:

a. It appears by the evidence that none of the changes in the course of Kern River have in any manner affected the supply of water to said Buena Vista Slough, nor have such changes in any manner dimin-
939 ished the supply of water to that portion of said slough north of the point where New River enters said slough; and it appears by the evidence that the overflows from said river and slough have been as frequent since said changes in said river as they were prior to said changes, except as such overflows have been less frequent by reason of the waters of Kern River being diverted by the defendant and others.

b. It appears by the evidence that earth and sand and other matters carried down New River and deposited in Buena Vista Slough, north of Buena Vista

940 Lake, have in no manner affected the capacity of Kern or Buena Vista Lakes, or in any manner increased the evaporation therefrom.

c. The evidence is insufficient to justify that portion of said sixteenth finding which states that from the place where New River enters Buena Vista Slough the waters of Kern River there flowing in their natural condition flow southward through said slough and into Buena Vista and Kern Lakes until said lakes are full, and, when full, said lakes extend so far northward, before overflowing, as to embrace within their limits the
941 junction of said river with said slough.

Fifteenth—The evidence is insufficient to sustain or justify the finding (17).

That in their natural condition whatever of the water of said river or of said lakes find or ever found their way northward and into said swamp, do not and never did so flow as to constitute a watercourse, and the same are and always have been used and accustomed, whenever they reach it, to flow generally over and through said swamp, and to squander themselves over the same, spreading from side to side, and having as a boundary
942 and border on each side the public lands of the United States outside of the segregation lines of said swamp as laid down on said map—in this:

a. It appears by the evidence that the waters of Kern River naturally flow on their way northward in a watercourse over and through the lands of plaintiffs in these findings and in the amended complaint described, and that said waters are, except in times of extreme high water, almost wholly confined to the natural water channel or channels running through said lands.

b. The evidence is insufficient to justify that part of
943 said seventeenth finding, which finds that the waters of Kern River, after reaching said swamp, squander themselves over the same, spreading from side to side, having as a boundary and border on each side the public lands of the United States, outside of the segregation lines of said swamp, as laid down on said map.

Sixteenth—The evidence is insufficient to sustain or justify the finding (18).

That, in part, the diagram annexed to the complaint herein shows the courses and channels of Kern River,

944 and the sloughs and lakes in said complaint mentioned, but not fully and correctly, and except in the particular in Finding No. 72 specified, the same are correctly and fully shown and delineated on the map hereto annexed, marked "Exhibit A," and made part of these findings; and said map marked "Exhibit A" correctly shows the body of swamp and overflowed lands within Kern County, which is referred to in these findings as "Buena Vista Swamp"—in this:

The evidence shows that Buena Vista Slough is not correctly delineated on the map annexed to the findings herein, marked "Exhibit A," nor does said map cor-
945 rectly show the body of swamp and overflowed lands referred to in said findings, nor are the courses and channels of Kern River correctly delineated on said map.

Seventeenth—The evidence is insufficient to sustain or justify the twentieth finding of fact in this:

It appears by the evidence that all acts done by the defendant in constructing a canal, and diverting the waters of Kern River, in no manner related to any appropriation by Calloway and others.

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Eighteenth—The evidence is insufficient to sustain or justify the twenty-first finding of fact in this:

It does not appear by the evidence that the defendant has, ever since the 4th day of May, 1875, claimed the right to divert, appropriate and consume the water of Kern River by the Calloway Canal.

Nineteenth—The evidence is insufficient to sustain or justify the finding (22).

947 That the defendant did not, by digging away or removing any of the bank of Kern River, or by constructing any canal or ditch or otherwise, prevent any of the waters of said river from flowing to, along, by, through, over or upon any of the said lands of the plaintiffs; nor has defendant by reason of any works by it done or erected, or otherwise, hindered or prevented any of said waters from flowing to, along, by, through, over or upon the said lands; nor have any of said waters been prevented from so flowing by reason of any diversion, appropriation or consumption thereof by defendant, except as in these findings stated—in this:

948 It appears by the evidence that the defendant has, by the construction of the Calloway Canal, and by diverting the waters of Kern River and appropriating and consuming the same, prevented the said waters of Kern River from flowing to, along, by, through, over and upon the lands of the plaintiffs in these findings and in the amended complaint described.

Twentieth—The evidence is insufficient to sustain or justify the finding (23).

That, except that, as set forth in these findings, the
949 lands to irrigate which defendant has diverted and is diverting waters from Kern River, border upon Kern River and embrace one of its banks at the head of the Calloway Canal, and that they are and always have been the lands of the United States of America, and that the United States is the riparian owner of all the land on both sides of said river, and that in compliance with law the defendant and its grantors appropriated the water diverted by it as set forth in findings 44, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60 and 61; said lands are not and never have been naturally irrigated by any of the waters of Kern River or otherwise, nor is the right
950 to the flow of said waters naturally incident and appurtenant to the same or any part thereof—in this:

a. It appears by the evidence that the lands to irrigate which the defendant has diverted and is diverting the waters of Kern River, do not border upon Kern River or embrace one of its banks.

b. It appears by the evidence that the lands referred to in said twenty-third finding are in part owned by private individuals, and not by the Government of the United States.

c. It appears by the evidence that the United States
951 is not the riparian owner of all the lands on both sides of Kern River, referred to and described in said twenty-third finding, but that a portion of said lands are owned by private individuals.

Twenty-first—The evidence is insufficient to sustain or justify the finding (24).

That except from the percolation and seepage in these findings mentioned, no water ran through or into said Buena Vista Slough, nor through, to, by, along, over or upon the said lands of plaintiffs between July, 1878,

952 and the commencement of this action; but that such failure of said water so to flow was not by reason of any taking out, diversion or appropriation thereof, or other act by or on the part of the defendant—in this:

It appears by the evidence that by reason of the appropriation by defendants of the waters of Kern River between July, 1878, and the time of the commencement of this suit, the said waters of Kern River failed to run into and through Buena Vista Slough and through, to, by, along, over and upon the lands of the plaintiffs, in the amended complaint and in the findings herein de-
953 scribed.

Twenty-second—The evidence is insufficient to sustain or justify the finding (25).

That during the period in the preceding finding mentioned Buena Vista Slough, from Buena Vista Lake to Buena Vista Swamp, was dry. That such condition of said slough was not in consequence of any diversion or appropriation of defendant—in this:

The evidence shows that it was by reason of the diversion of the waters of Kern River by the defendant,
954 that the said waters failed to run down Buena Vista Slough between July, 1878, and the date of the commencement of this action.

Twenty-third—The evidence is insufficient to sustain or justify the finding (26).

That, except from the percolation and seepage in these findings mentioned, during the period in the preceding finding mentioned, the waters of Kern River did not irrigate or moisten said lands of plaintiffs, or supply water thereon; but that said water did not, during said period, fail to irrigate and moisten said lands or to
955 supply water thereon for general uses, as it would naturally have done; and that it was not in consequence of any diversion or appropriation by defendant that said water failed to or did not irrigate, moisten or supply any of said lands of plaintiffs—in this:

It appears by the evidence that by reason of the diversion of the waters of Kern River by the defendant, the said waters did fail to run down Buena Vista Slough and to irrigate and moisten the lands of plaintiffs, in the amended complaint and in the findings herein described, as they would naturally have done but for said diversion.

956 Twenty-fourth—The evidence is insufficient to sustain or justify the finding (27).

That none of the said lands of the plaintiffs were, during the said period in the preceding finding mentioned, deprived of their natural moisture, nor in consequence of any deprivation of their natural moisture, or of any diversion or appropriation by defendant, did they become dry or deteriorated in value—in this:

It appears by the evidence that the lands of the plaintiffs were, during the period mentioned in said twenty-seventh finding, deprived of their natural moist-
957 ure, and in consequence of the diversion and appropriation by defendant of the waters of Kern River; and it further appears by the evidence that by reason of said diversion, said lands did become dry and deteriorated in value.

Twenty-fifth—The evidence is insufficient to sustain or justify the finding (28).

That a continuance of the diversion and appropriation of the water of Kern River in the future to the extent it has taken place heretofore, and to the capacity
958 of the Calloway Canal, will not deprive the said lands of the plaintiffs of their natural moisture, or cause them to become dry or deteriorated in value, or deprive them of water for general uses, or prevent them from being irrigated or moistened by the waters of said Kern River —in this:

It appears by the evidence that a continuance of the diversion and appropriation of the waters of Kern River in the future by the Calloway Canal will deprive the lands of plaintiffs of their natural moisture, and cause them to become dry and deteriorated in value, and deprive them of water for general uses, and prevent them
959 from being irrigated or moistened by the said waters of Kern River.

Twenty-sixth—The evidence is insufficient to sustain or justify the finding (30).

That said lands of the plaintiffs have not always (except in seasons of extreme drought, and except when prevented by diversion) been wet and naturally irrigated during the winter and spring by the natural flow of the waters of Kern River. That, except by the water reaching them through or in consequence of the seepage,

960 percolation, overflows, and obstructions at Cole's Crossing, in these findings set forth, said lands have never been wet or irrigated by any waters of Kern River—in this:

It appears by the evidence that the lands of plaintiffs, except in seasons of extreme drought, and except when prevented by diversion, have been wet and naturally irrigated during the winter and spring by the natural flow of the waters of Kern River; that said lands have not depended upon seepage and percolation from or overflow of Kern River, or obstructions at Cole's Crossing, as set forth in said thirtieth finding, for their
961 moisture.

Twenty-seventh—The evidence is insufficient to sustain or justify the finding (31).

That, except by the seepage and percolation and the overflows in these findings mentioned, and except as stated in Finding 79, the waters of Kern River did not cause said lands of the plaintiffs, or any portion thereof, to be swamp and overflowed land—in this:

It appears by the evidence that the waters of Kern
962 River did cause the lands of plaintiffs to become swamp and overflowed lands, and that said lands are supplied with water by a direct and continuous flow from Kern River, and not by seepage, percolation and overflow of Kern River.

Twenty-eight—The evidence is insufficient to sustain or justify the finding (33).

That the facts that the said lands of the plaintiffs were supplied with water and were useful for pasturage in dry years, as and to the extent stated in these findings, entered into the consideration of plaintiffs in purchasing
963 the said lands; but except, as in this finding stated, the plaintiffs were not induced to purchase said lands because they were wet or irrigated, or designated as swamp and overflowed lands--in this:

It appears by the evidence that the fact that the lands in the amended complaint and findings described were supplied with water and made useful for pasturage in dry years, did enter into the consideration of plaintiffs in purchasing the said lands, and that said plaintiffs would not have purchased said lands had they not been wet and irrigated, and swamp and overflowed lands.

964 Twenty-ninth—The evidence is insufficient to sustain or justify the finding (34).

That plaintiffs did not pay large or any sums of money for said lands of plaintiffs, or expend large or any sums of money in improving the same, or in constructing works for controlling, regulating or utilizing any water supplied to them on the faith that said lands would have the benefit of the natural or other irrigation, or overflow, or water for other uses, or otherwise; nor have plaintiffs constructed any such works—in this:

965 It appears by the evidence that the plaintiffs did pay large sums of money for said lands on the faith that said lands would have the benefit of the natural overflow of the waters of Kern River; and it appears by the evidence that the plaintiffs did expend large sums of money in constructing works for controlling, regulating and utilizing the water of Kern River, and supplying said lands with water.

Thirtieth—The evidence is insufficient to sustain or justify the finding (35).

966 That since the diversion by the defendant herein found, the said lands of the plaintiffs have not been drying up, and have not been becoming less fit to produce crops or support cattle, nor will said lands dry up or be continually drying up, or become less fit to produce crops and support cattle, unless defendant be restrained and enjoined from diverting the water—in this:

a. It appears by the evidence that ever since the diversion by the defendant of the waters of Kern River, the lands of plaintiffs have been drying up and becoming less fit to produce crops or support cattle.

967 *b.* It appears by the evidence that unless the defendant be restrained and enjoined of diverting said waters, said lands of plaintiffs will continue to dry up and become less fit to produce crops and support cattle.

Thirty-first—The evidence is insufficient to sustain or justify the finding (36).

That in consequence of the diversion and appropriation and consumption of the wrters by defendant it has not become and is not necessary to pump water on plaintiffs' lands, nor will it in the future be necessary by reason of a continuance of such diversion, appro-

968 priation and consumption to pump water thereon; and that it has not been necessary and will not unless defendant be restrained from so diverting and appropriating and consuming the waters of Kern River, be necessary to pump water on said lands, except in extremely and unusually dry and rarely recurring years; but that such pumping has not been and will not be in any manner necessitated or occasioned by the aforesaid diversion, appropriation and consumption by defendant or by any continuance thereof—in this:

It appears by the evidence that it has been necessary
969 by reason of the diversion, appropriation and consumption of the waters of Kern River by the defendant, for said plaintiffs to pump water on their lands, and that unless defendant is restrained from diverting, appropriating and consuming the said waters of Kern River, it will be necessary to pump water every season on said lands of plaintiffs for such stock as they may have thereon, whether such season be unusually dry or not.

Thirty-second—The evidence is insufficient to sustain or justify that portion of the finding numbered 37, which finds that:

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The accumulation of snow in the mountains at the head of Kern River is not usual or customary, but only occasional and in rarely recurring years; as it appears by the evidence that said accumulation of snow on said mountains occurs annually.

Thirty-third—The evidence is insufficient to sustain or justify the finding (38).

That willows and other trees and shrubs began from time immemorial and before the diversion by the de-
971 fendant herein stated, to grow up in the bed of Kern River, both above and below the point of said diversion, and the same are still growing and becoming year by year more serious obstructions to the river channel; but that such growth was not by reason of, or a consequence of, or enhanced by said diversion—in this:

It appears by the evidence that the growth of trees and shrubs in Kern River has been increased and enhanced by reason of the diversion of said waters by the defendant.

972 Thirty-third and a half—The evidence is insufficient to sustain or justify that portion of the finding numbered 40, which finds that Kern, Buena Vista and Tulare Lakes are not a portion of a continuous watercourse.

It appears by the evidence that said lakes are a part of a continuous watercourse, commencing with Kern River, thence running through Kern and Buena Vista Lakes and Buena Vista Slough, and into Tulare Lake.

Thirty-fourth—The evidence is insufficient to sustain
973 or justify the finding (43).

That the said lands of plaintiffs have not been irreparable or otherwise injured by any act or acts of the defendant, or by its diversion, appropriation or use of the waters of Kern River in these findings set forth and that the said acts of the defendant if suffered to continue, will not be, or cause irreparable, or any injury to said lands or any part thereof, and will not cause the ruin of said lands or any part thereof; that they will not be grievances, but will be constantly recurring and will be such as can be compensated in damages, and
974 that for the same the plaintiffs have and always will have a plain, speedy and adequate remedy and relief at law —in this:

It appears by the evidence, that the diversion of the waters of Kern River by the defendant, if suffered to continue, will cause irreparable injury to the lands of plaintiffs, and will be a constantly recurring injury, such as cannot be compensated in damages, and that the plaintiffs cannot have a plain, speedy and adequate remedy at law.

975 Thirty-fifth—The evidence is insufficient to sustain or justify the finding (45).

That the said lands of plaintiffs have never bordered, or been situated in whole or in part, upon any watercourse or natuaal stream—in this:

It appears by the evidence that the lands of plaintiffs have bordered, and do border, and are situated, in all or in part, upon a watercourse or natural stream, to-wit: Buena Vista Slough, which is a continuation of, and a canal connected with, and a part of Kern River.

976 Thirty-six—The evidence is insufficient to sustain or justify the finding (46).

That no water-course or natural stream flows or flowed to, along, by, through, over or upon said lands of plaintiffs, or any part thereof—in this:

It appears by the evidence, that a water-course or natural stream flows, and from time immemorial has flowed to, along, by, through, over and upon the lands of plaintiffs in the amended complaint and in these findings described.

977 Thirty-seventh—The evidence is insufficient to sustain or justify the finding (47):

That there is not and has not been any right whatsoever to the waters of Kern River naturally or otherwise incident or appurtenant to said lands of plaintiffs or any part thereof—in this :

It appears by the evidence that the waters of Kern River naturally are incident and appurtenant to the lands of plaintiffs and every part thereof.

978 Thirty-eighth—The evidence is insufficient to sustain or justify the finding (48):

That plaintiffs are not and have not been, nor is or was any of them the riparian proprietor, or proprietor, owners or owner of lands on or bordering upon Kern River, or any of the branches, sloughs or channels thereof—in this :

It appears by the evidence that the plaintiffs are riparian proprietors and owners of the lands in the amended complaint described, and that such lands border upon
979 Buena Vista Slough, which is a continuation of, and a channel connected with, and a part of, Kern River.

Thirty-ninth—The evidence is insufficient to sustain or justify the finding (49):

That plaintiffs are not and have not been, and that none of them is or ever has been, by virtue of the ownership, possession or occupation of the said lands of plaintiffs, or otherwise, riparian proprietors, owners, proprietor or owner, or entitled to have the waters of Kern River, or any part thereof, flow to, along, by,

980 through, over or upon said lands or any part thereof, or to take out, divert, appropriate or use any of said waters—in this:

It appears by the evidence that the plaintiffs, as riparian owners and proprietors, are entitled to have the waters of Kern River flow to, along, by, through, over and upon their lands, in the amended complaint and in the findings herein described.

Fortieth—The evidence is insufficient to sustain or justify the finding (50).

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That except the said Buena Vista Swamp, and except the sixteenth (16th), and thirty-sixth (36th), sections in each township, which belonged to the State of California, all the lands delineated upon and embraced by the map hereto annexed, marked "Exhibit A," are and always have been public lands of the United States of America—in this:

It appears by the evidence that a part of the lands delineated upon and embraced in the map attached to the findings, marked Exhibit A, other than the lands
982 referred to in the fiftieth finding as Buena Vista Swamp and the 16th and 36th sections, are owned by private individuals and do not belong to the United States of America.

Forty-first—The evidence is insufficient to sustain or justify the finding (51):

That on the 4th day of May, 1875, the grantors of the defendant desiring to appropriate seventy-four thousand (74,000), inches of the waters of Kern River, measured under a four inch pressure, posted a notice in
983 writing in a conspicuous place at the point of intended diversion, which is in these findings specified and stated therein: *First*, that they claimed the waters of Kern River there flowing, to the extent above mentioned; *Second*, the purposes for which they claimed it and the place of intended use, as in these findings is specified; *Third*, the means by which they intended to divert said water, and the size of the ditch or acqueduct through which they intended to divert it, as in these findings is specified. A copy of said notice was within ten days after it was posted as aforesaid, recorded in the office of the County Recorder of the

984 County of Kern, in which County said notice was posted. Within sixty days after said notice was posted, the defendant commenced the excavation and construction of the said works in which it was intended to divert said water, and prosecuted said works diligently and uninterruptedly to completion, and thereby diverted said waters to the place of intended use—in this:

It does not appear by the evidence that the grantors of the defendant at any time posted a notice claiming to appropriate the waters of Kern River, as specified in the Fifty-First finding. It appears by
985 the evidence that no copy, notice of appropriation by the grantors of the defendant was ever within ten days of the time of posting such notice, recorded in the office of the County Recorder of Kern County. It does not appear by the evidence that the grantors of the defendant or any of them, ever at any time had recorded in the office of the Recorder of Kern County a notice, or a copy of a notice claiming to appropriate the waters of Kern River, in connection with the Calloway Canal, or in connection with any other canal, on the contrary, it appears that no such notice was ever recorded at any time.
986

Forty-second—The evidence is insufficient to sustain or justify the finding (52):

That the notice mentioned in the preceding finding was posted at the point on the north bank of Kern River, in Section Thirteen (13), in Township Twenty-nine (29) South, Range Twenty-seven (27) East, Mount Diablo base and meredian, where the Calloway Canal diverges from Kern River, as shown on the map hereto annexed, marked Exhibit A, which said point was the
987 point designated and intended by the said grantors of the defendant as the point of diversion of said water—in this:

It does not appear by the evidence that the notice mentioned in Finding 51, or any notice claiming to appropriate the waters of Kern River, was posted on the north bank of Kern River, in Section 13, Township 29, Range 27, where the Calloway Canal diveges from Kern River, or at any other point on Kern River.

988 Forty-second and a half—The evidence is insufficient to sustain or justify the following portion of the finding numbered 55, to wit:

"That the said notice of appropriation was signed "by the grantors of the defendant"—in this:

It does not appear by the evidence that said notice, or any such notice, was ever signed by the grantors of the defendant. On the contrary, it appears by the evidence that said notice never was signed by the said grantors of the defendant, nor by any of them.

989 Forty-third—The evidence is insufficient to sustain or justify the finding (56):

That the notice of appropriation of said Calloway Canal, in these findings set forth, was recorded by the County Recorder of said County of Kern, in Volume One of Water Rights, the book kept by him according to law for the purpose of recording notices of appropriation of water, on pages 37, 38 and 39, in this:

It does not appear by the evidence that the notice of appropriation of the Calloway Canal referred to in the
990 fifty-sixth finding ever was recorded in the office of the County Recorder of Kern County, in Volume One of Water Rights, on pages 37, 38 and 39. And it appears by the evidence that said notice of appropriation never was recorded in the office of the said County Recorder of Kern County at any time.

Forty-fourth—The evidence is insufficient to sustain or justify that portion of the finding numbered 57, which finds that within sixty days after the posting of the notice in the preceding finding mentioned, the defendant surveyed and staked out the line of the Calloway Canal as now constructed.

On the contrary, it appears by the evidence that the line of said Calloway Canal, as now constructed, was not surveyed and laid out until many years after said pretended notice was posted.

And the evidence is insufficient to sustain or justify the following portion of said Fifty-seventh Finding, to wit: "And at the time of the commencement of this "action (defendant), had constructed and completed "said canal to a point where it crosses Poso Creek,

992 " in Section 26, Township 26, south, Range 25 East." On the contrary, it appears by the evidence that said canal was not constructed to said Poso Creek until a long time after the commencement of this action.

And the evidence is insufficient to sustain or justify that portion of said Fifty-seventh Finding which finds that defendant, prior to the commencement of this action, had expended in constructing the main canal and side-ditches of said canal, the sum of one hundred and ten thousand dollars. On the contrary, it appears that no such sum has ever been expended in construct-
993 ing said canal and side-ditches.

Forty-fifth—The evidence is insufficient to sustain or justify the finding (60):

That the lands designated in said notice, and to irrigate which the waters of Kern River were appropriated and the Calloway Canal was constructed as aforesaid, border upon and lie along said Kern River, and extend therefrom northward in one compact body along the route of said canal—in this:

994 It appears by the evidence that the lands to irrigate which the waters of Kern River are diverted by the Calloway Canal, do not border on Kern River and extend therefrom northward in one compact body along the route of said canal.

Forty-sixth—The evidence is insufficient to sustain or justify the following portion of the finding numbered 61, to wit: " And that the water now conveyed by said " canal will hereafter be sufficient to irrigate seventy " thousand (70,000) acres of said lands, extending in " a body from and including the north bank of Kern
995 " River." On the contrary, it appears by the evidence that the water now appropriated by the defendant will not be sufficient to irrigate to exceed fifteen thousand acres of land.

Forty-seventh—The evidence is insufficient to sustain or justify the 62d finding in this: It appears by the evidence that no canal company taking water from Kern River has ever complied with the law under which appropriation of water may be made in the State of California.

996 Forty-eighth—The evidence is insufficient to sustain or justify the finding (63):

That from, during, and at the times when the acts in these findings, set forth as constituting the appropriation and diversion by the defendant and its grantors, were done, the plaintiffs and each of them knew and were informed thereof, and knew and were fully and correctly informed of and concerning the intention of the defendant and its grantors to make said appropriation and of the extent and purposes thereof, and knew that in reliance upon the acquisition of the right to
997 said water so appropriated, the defendant was expending, would expend and had expended the large amounts herein found in the construction of its said works, and that in like reliance third parties were about to expend and did expend much money and labor in irrigating and cultivating the said lands along the route of said Calloway Canal; and were fully informed of all the circumstances surrounding and attending the location, construction and maintenance of said canal and works of defendant and of the character of said lands, and that if prevented from using said water so appropriated all the said labor, expenditure
998 and effort of the defendant would be fruitless and a total loss. And that the plaintiffs until the commencement of this action made no objection to the said appropriation or acts of the defendant, but acquiesced therein and stood by while the defendant, from the year 1875 to the said 12th day of May, 1879, continued the construction of said canal and diverted the waters of Kern River through the same every year during the period last aforesaid and applied the same to the irrigation of said lands. That the said period during which the plaintiffs so neglected and delayed to notify the defendant of their claim to said water or
999 assert or prosecute whatever rights they had in the premises was an unreasonable delay, and that the plaintiffs were thereby guilty of gross neglect and long and unreasonable delay and laches, in this:

It appears by the evidence that the plaintiffs did not, nor did either of them, know, nor were they informed of or concerning, the intention of defendant or its grantors to make said appropriation of said water or any appropriation of said water, or of the extent or purposes for which such appropriation was to be made.

1000 Nor did the plaintiffs or either of them know that the defendant or its grantors were expending or would expend or had expended large or any sum of money in the construction of any works.

And it appears by the evidence that plaintiffs did not nor did either of them have any notice that third parties were about to expend or did expend much or any money or labor in irrigating and cultivating lands along the route of said Calloway Canal.

It appears by the evidence that said plaintiffs were
1001 not, nor was either of them informed of all or of any of the circumstances surrounding or attending the location, construction or maintenance of said canal and works of defendant, or of the character of the lands, or that if prevented from using said water so appropriated, all the labor, expenditure and effort of the defendant would be fruitless and a total loss.

It appears by the evidence that the plaintiffs have not, nor has either of them, been guilty of any unreasonable delay or gross neglect or laches in asserting their rights or claims to the waters of said Kern
1002 River.

Forty-ninth—The evidence is insufficient to sustain or justify the finding (64):

That the plaintiffs had actual knowledge of the purposed construction of the Calloway Canal, and of the purpose thereof, as herein found, before the same was commenced, and knew of the commencement of the construction thereof at the time such construction began, and knew of the proposed dimensions thereof, and of the continuous construction thereof, as herein-
1003 before found, and made no objection thereto, but acquiesced therein from the time of the commencement of said construction to the time of filing their complaint in this action—in this:

It does not appear by the evidence that the plaintiffs or either of them had any knowledge, actual or otherwise, of the proposed construction of the Calloway Canal, or the purposes thereof, before the same was commenced, or that they knew of the commencement of the construction of said canal at the time such construction began, or that they knew or were informed,

1004 in any manner of the proposed dimensions thereof, or of the continuous or any construction of said canal. On the contrary, it appears by the evidence that plaintiffs had not, nor had either of them, any such knowledge or notice.

Fiftieth—The evidence is insufficient to sustain or justify the finding (65):

That the natural drainage of Kern River and the surrounding is and ever has been to and into Kern and Buena Vista Lakes, and that in their natural con-
1005 dition Kern and Buena Vista Lakes, when full, form one continuous body or sheet of water; that the natural and usual flow of the waters of Kern River, whether through the South Fork or through Old River, or through New River, is and has ever been to and into said lakes, and that the ordinary and natural receptacle, terminus and place of discharge of the natural, usual and accustomed flow of the waters of Kern River is and ever has been Kern and Buena Vista Lakes—in this:

1006 It appears by the evidence that the natural drainage of Kern River, prior to the flood of 1861–2, was through what was known as the South Fork and Old River Channels, the former emptying into Kern Lake, and the Lake into the channel connecting Kern and Buena Vista Lakes, and thence through said lakes down Buena Vista Slough; that after said flood of 1861–2, and until the flood of 1867–8, the natural drainage of Kern River was also through the same channels, but that nearly all of the waters of said rivers, between those two dates, was through what was known as Old River, and that such waters then continued on, as for-
1007 merly, down Buena Vista Slough; that since the flood of 1867–8 the natural drainage of Kern River has been and still is down what is known as New River and into Buena Vista Slough, by two branches, called respectively the North and South Branches, and at times there are three branches; that the waters of Kern River that ran through the two northern branches, after reaching said sloughs, continued northward and down said slough towards Tulare Lake; that the waters that ran in the South Branch divided, a part running north and down Buena Vista Slough, and the remainder running into Buena Vista and Kern Lakes; and that, after

1008 said Lakes were filled, then all the waters of Kern River ran northerly down Buena Vista Slough and towards Tulare Lake.

Fifty-first—The evidence is insufficient to sustain or justify the finding (66):

That the waters of Kern River do not and never did naturally and usually flow to, through, along, by, over or upon the said lands of plaintiffs, or any part thereof; and that until the year 1876, whatever of the water of Kern River flowed to or reached the said lands, or any
1009 part thereof, was from the unusual and extraordinary overflow of said river, or of Kern and Buena Vista Lakes, or from the percolation and seepage in these findings mentioned—in this:

It appears by the evidence that the waters of Kern River naturally and usually flow to, through, along, by, over and upon the lands of the plaintiffs.

And it further appears by the evidence that the waters so flowing to, through, along, by, over and upon the lands of the plaintiffs, were not from an extraordinary or unusual flow of said river, or of Kern
1010 or Buena Vista Lakes, or from percolation or seepage, but were from the usual and natural flow of the waters of said river.

Fifty-second – The evidence is insufficient to sustain or justify the following portion of the finding numbered 68, to wit: "That the Kern Valley Water Company, in " 1867, constructed a certain other dam and levee, ex- " tending completely across the said Buena Vista " Swamp, as shown on said map, and thereby com- " pletely obstructed and prevented the natural flow
1011 " of any water into, through or over said swamp, " northward of said last mentioned levee, and appro- " priated and took possession and control of all the " waters reaching said levee, and turned the same " into the said canal; and that the said dam and levee " last mentioned are some distance southward from " the southernmost part of the said lands of the " plaintiffs; and from and after their construction " no water has naturally flowed, or could naturally " flow, northward beyond the head of said canals, or " to or upon the said lands of the plaintiffs, or any " part thereof."

1012 On the contrary, it appears by the evidence that said dam and levee were not so constructed as not to interfere with the natural flow of the waters of Kern River down and through Buena Vista Slough, and to and upon the lands of the plaintiffs.

Fifty-third—The evidence is insufficient to sustain or justify the finding (69):

That the construction of the canals, dams and levees described in the preceding finding was undertaken and prosecuted with the knowledge, consent and ap-
1013 proval of the plaintiffs.

That the levee last described in said preceding finding was constructed for the purpose of diverting all the water washing said levee into the said canals; and such levee does entirely obstruct, and since its construction has obstructed, the natural flow of any water northward in said Buena Vista Swamp beyond said levee, and directs the same into said canals; and that the plaintiffs, at and before the time of the commencement of the construction of the said levee, knew of the purposes thereof, and approved the same; and knew of the
1014 beginning and prosecution of the construction thereof, and consented to and approved of such construction; that said canal and levee were constructed at great expense, and because of and in reliance upon the said approval and consent of the plaintiffs, and but for such approval and consent could not have been constructed — in this:

a. It does not appear by the evidence that the plaintiffs, or either of them, had any knowledge of, or in any manner consented to, or approved of, the construction of the canals constructed by the Kern Valley
1015 Water Company.

b. It appears by the evidence that all of the waters of Kern River that are diverted by the dam, levee and canals of the Kern Valley Water Company, are not so diverted as to interfere with the flow of said waters through Buena Vista Slough; and that all of the water of said river turned into said canals, ultimately is returned to Buena Vista Slough, and runs through said slough and to, through, along, by, over and upon the lands of the plaintiffs, in the amended complaint and findings described.

1016 Forty-fourth—The evidence is insufficient to sustain or justify the finding (70):

That throughout Buena Vista Swamp there is a surface stratum of decomposed vegetable loam, varying in depth from one to five feet, and underlying this surface stratum is a bed of sand. That interspersed throughout said swamp there are innumerable holes or depressions from a few inches to some twelve or fifteen feet deep. That owing to the nature of the subsoil and the character of the country, water from Kern River and Buena Vista Lake percolated and seeps through to
1017 and rises in these holes or depressions, and at times spreads or flows from one to another, but in no continuous channel or defined course. That by such percolation and seepage the lands in said swamp are naturally irrigated and moistened—in this:

There is no evidence whatever in the case to support, or in any manner justify or warrant, said seventieth finding.

There is no evidence in the case to support the following portion of said seventieth finding, to wit:

1018 "That throughout Buena Vista Swamp, there is a "surface stratum of decomposed vegetable loam, "varying in depth from one to five feet, and underlying "this surface stratum is a bed of sand."

Fifty-fifth.—The evidence is insufficient to sustain or justify the finding (71):

That from the point where New River, enters Buena Vista Slough, a channel extends southerly into Buena Vista Lake, as shown upon the map hereunto annexed. That from said point where said river enters said
1019 slough, to and into Buena Vista Swamp as far north as Section twenty-four (24), Township twenty-nine (29), South, Range twenty-three (23), East; there is a traceable, but in places detached channel, (shown on the annexed map, and thereon designated as Buena Vista Slough), of varying width and depth. That from the river northerly to said swamp, said channel is well defined, but after reaching said swamp to its northern extremity in said Section twenty-four (24), said channel is not well defined, nor continuous, and is not a defined natural channel with bed and banks, but consists more of a series of holes, than a regular water

1020 way. That said channel terminates in, and is not traceable beyond said Section twenty-four (24). That whatever waters have gotten down into said swamp without the aid of the artificial obstructions in those findings mentioned, before reaching any of said lands of plaintiffs have not been confined to said channel, but have spread generally and indefinitely over said swamp; and that said waters do not constitute a regular flowing stream, or water-course, but consists in addition to the seepage and percolation in these findings mentioned, of occasional bursts of water, which in times of freshets, or melting snow, overflows the banks of
1021 the river above, or flow out of the Buena Vista and Kern Lakes, after having been stationary therein, and inundate the whole of said swamp as far northward as far as the water reaches. That said swamp though sloping slightly towards the north, is generally flat and level; and though interspersed throughout the same, there are channels, hollows and depressions, either natural or made in part by the action of the floods and waters, such channels, hollows and depressions have no continuity or connection one with another and are found running in all directions and generally throughout said swamps. That whatever flow or
1022 movement said waters have or ever had, is not, and never was usual or accustomed, but is, and was only occasional and sluggish, and in no manner confined to said channels, hollows or depressions—in this:

a. It appears by the evidence that Buena Vista Slough is not only traceable to Section 24, Township 29 South, Range 23 East, but it also appears that its channel is continuous, and in no places detached; and it appears from the evidence that said slough is not correctly delineated upon the map attached to the find-
1023 ings herein, marked Exhibit "A;" that said slough or channel is well defined and continuous from the point where Kern River empties into said slough to said Section 24.

b. And it appears by the evidence that said Buena Vista Slough or channel does not terminate on said Section 24. On the contrary, it appears by the evidence that the said slough is traceable beyond said Section 24, and all the distance through the body of swamp and overflowed lands lying between Buena Vista and Tulare Lakes.

1024 *c.* And it appears by the evidence that the waters of Kern River which have reached the lands of plaintiffs, after reaching said lands have been confined to a channel, or channels, except in times of extreme high water, when the banks of said channels may have been overflowed for a limited time.

d. And it appears by the evidence that, instead of the swamp land being interspersed throughout with channels, holes and depressions having no continuity one with another, there is a continuous channel and water-course through the whole body of said swamp
1025 land, and that through nearly the whole body of said swamp land there are two or more such channels and water-courses.

e. And it appears by the evidence that the flow of the waters of Kern River to and over said swamp land has been confined to said channels, and has been the usual and customary flow of the waters of said river, and not an occasional and irregular flow.

Fifty-sixth—The evidence is insufficient to sustain
1026 or justify the finding (72):

That the portion of Buena Vista Slough from New River to Buena Vista Swamp, though continuous and well defined, is in places shallow, and does not constitute a water-course, and the waters which form the overflows, elsewhere in these findings mentioned, reach said swamp over the surface of the country, are not confined to the bed and banks of said slough, but spread and flow as well over the adjacent country as through the slough itself, and that such flow is not usual, definite or accustoned, as is, nor does it correspond with that of the waters of Kern
1027 River before reaching Buena Vista and Kern Lakes, but is only occasional, as in these findings elsewhere described. That the slough or channel marked on the annexed maps as Buena Vista Slough, is, as far northward as, and until reaching Buena Vista Swamp, known as and called Buena Vista Slough, but after reaching said swamp and ceasing to be well defined or continuous, as in these findings set forth, it ceases to be distinguished as Buena Vista Slough, and the term Buena Vista Slough is then applied to and used to designate the whole of said swamp, and not any particular channel therein—in this:

1028 *a.* It appears by the evidence that Buena Vista Slough, from the point where it leaves Kern River to the place where it enters the body of swamp and overflowed lands, is continuous and well defined, and that during all that distance, it constitutes a water-course, and that the waters of Kern River which reach said body of swamp and overflowed lands, reach the same through the said water-course, and not by flowing over the surface of the country; that such flow through said water-course is usual, definite and customary, and that it corresponds with the flow of the waters of Kern River before reaching said Buena Vista Slough.

1029 *b.* And it appears by the evidence that Buena Vista Slough is a name applied to the channel or water-course running from Buena Vista Lake to Tulare Lake, and that said name never was applied to or used to designate the whole body of swamp lands lying between said lakes.

Fifty-seventh—The evidence is insufficient to sustain or justify the finding (73):

1030 That the use to which the water diverted by the defendant was applied to supply a natural want, and the quantity taken was necessary and reasonable—in this:

It appears by the evidence that the water diverted by the defendant was not applied to supply a natural want, and that the quantity taken by the defendant was not necessary, nor was it a reasonable quantity.

Fifty-eight—The evidence is insufficient to sustain or justify the finding (74):

1031 That, on the lands irrigated by the Calloway Canal, irrigation is a natural want, and that defendant took no more of the waters of Kern River than was necessary and reasonable—in this:

It appears by the evidence that the defendant took and diverted from Kern River more of its waters than was necessary or reasonable.

Fifty-ninth—The evidence is insufficient to sustain or justify the finding (75):

1032 That Kern River is not, throughout its whole course down to Buena Vista and Kern Lakes, a perennial stream, nor during the period of its flow are the waters therein flowing uniform or constant in amount and volume, but the volume and amount of said waters vary and are subject to great and sudden fluctuations; that generally the irrigation season along Kern River is from February to July; that usually during said irrigation season there is ample and abundant water flowing down said river, not only to fill the aforementioned canals and ditches heading on said river, including that of defendant, and furnish and supply to
1033 them sufficient water to irrigate the lands by them irrigated, as in these findings stated, but also to flow to said Buena Vista Slough; and since the construction of the dam and levee at Cole's Crossing, and the turning of the waters there reaching northwards, as in these findings mentioned, to wet up and thoroughly irrigate all the lands in Buena Vista Swamp, and supply water thereon for all useful and needful purposes—in this:

a. It appears by the evidence that Kern River is, throughout its whole course down to Buena Vista
1034 Slough, a perennial stream.

b. And it appears by the evidence that the volume or amount of water running in Kern River from February to July of each year, and during what is styled in said 75th finding the irrigating season, is not sufficient to fill the canals and ditches heading on said river, including that of the defendant, and to furnish and supply to them sufficient water to irrigate the lands by them irrigated, as in said findings stated, and also to flow to said Buena Vista Slough.

1035 *c.* And it appears by the evidence that, since the construction of the dam and levee at Cole's Crossing, sufficient water has not run down through Kern River and Buena Vista Slough to wet up and thoroughly irrigate all the lands of plaintiffs, and supply water thereon for all useful and needful purposes.

Sixtieth.—The evidence is insufficient to sustain or justify the finding (76):

That during the irrigation season of the year the amount of water diverted from Kern River by defend-

1036 ant is not sufficient to materially affect or substantially diminish the volume or amount of water usually reaching Buena Vista Slough; and that during the balance of the year none of the water by defendant diverted would, if not so diverted, ever, in its natural flow, flow to or reach the said lands of plaintiffs, or any part thereof—in this:

a. It appears by the evidence that the amount of water diverted from Kern River by the defendant during the irrigating season is sufficient to materially
1037 affect and substantially diminish the volume and amount of water usually reaching Buena Vista Slough.

b. And it appears by the evidence that the water diverted by the defendant from Kern River during the portion of the year not included in the irrigating season would, if not so diverted in its natural flow, flow to and reach the lands of plaintiffs.

Sixty-first—The evidence is insufficient to sustain or justify the finding (77):

1038 That the period from July, 1878, to the commencement of this action, was one of unusual scarcity of water throughout the whole course of Kern River, and that during said period none of the waters by defendant diverted would naturally have flowed to or reached said lands of the plaintiffs, if not so obstructed—in this:

It appears by the evidence that the period from July, 1878, to the commencement of this action, was not one of unusual scarcity of water throughout the
1039 whole course of Kern River; and that, if the waters of said Kern River had not during said period been diverted, they would naturally have flowed to and reached the lands of plaintiffs.

Sixty-second.—The evidence is insufficient to sustain or justify the finding (78):

That Buena Vista Slough is on the extreme western side of the valley, lying between the Sierra Nevada and the Coast Range of Mountains. That immediately west and near by said slough the foothills of said

1040 Coast Range begin to rise. That from the point where Kern River enters the plains on the east, clear across to said foothills, is a ridge or stretch of high land, dividing the basin of Kern and Buena Vista Lakes from the basin or trough occupied by Buena Vista Swamp and Tulare Lake. That the slope of said ridge is greater and more precipitous southward towards Kern and Buena Vista Lakes than it is northwards or towards Buena Vista Swamp and Tulare Lake. That from said point where the river enters the plains it follows generally along the crest of said ridge, bearing, however, southward, and keeping on the
1041 southern slope thereof to Buena Vista Slough, through which, since the formation of New River, and until prevented by the artificial obstruction at Cole's Crossing, it emptied its waters there, reaching into Buena Vista and Kern Lakes. That said ridge extends across Buena Vista Slough at a point north of where New River enters said slough and south of Buena Vista Swamp, and until the construction of the aforesaid obstructions at Cole's Crossing, has prevented any of the waters of Kern River, or of Buena Vista and Kern Lakes from flowing northward to Buena Vista Swamp, except in the occasions of overflow in these findings
1042 mentioned—in this:

a. It appears by the evidence that, since the formation of New River, its waters have chiefly emptied into Buena Vista Slough, and run northward down said slough, and never have found their way into Buena Vista or Kern Lakes; that the small portion of the waters of said river which have emptied into Buena Vista and Kern Lakes, eventually, after the lakes became full, have escaped northward down through Buena Vista Slough, running towards Tulare Lake.

1043

b. And it appears by the evidence that there is no ridge extending across Buena Vista Slough at a point north of where New River enters said slough; but that, on the contrary, the main body of the waters of Kern River empty into Buena Vista Slough at a point in said slough of such elevation that said waters run northwardly and down through said slough towards Tulare Lake; and that such flow is not occasional and in times of overflow, but is the usual and natural flow of the waters of Kern River.

1044 Sixty-third—The evidence is insufficient to sustain or justify the finding (79):

That from the overflow in these findings mentioned, the water which has reached Buena Vista Swamp has, until obstructed by the works of the Kern Valley Water Company, in Findings 71 and 72 mentioned, flowed to the uppermost or southern body of plaintiffs said lands, and extended northward over said swamp to a greater or less distance towards Tulare Lake, according to the fall of rain and snow, and without any regularity or certainty; but for more than ten (10) years next
1045 preceding the commencement of this action, none of said water has flowed to Tulare Lake, save and except in the exceptional and rarely recurring years of excessive and unusual rain and snow a portion of said water has flowed to and into said Tulare Lake, following, however, no defined channel over said swamp, but generally spreading throughout the same, and not constituting a water-course or regular flowing stream. That the waters which from said overflows reach said swamp, except such surplus portion thereof as passes to Tulare Lake, remain on said
1046 swamp for a great length of time. That the overflows and the seepage and percolation in these findings mentioned, did, prior to September 28th, 1850, cause said lands within said swamp to be swamp and overflowed lands, and said lands had become and were on said twenty-eighth day of September, 1850, swamp and overflowed lands, and as such were granted to the State of California by Act of Congress, approved September 28th, 1850—in this:

It appears by the evidence that the flow of the waters of Kern River down through Buena Vista
1047 Slough and through the body of lands in the amended complaint and in these findings described is regular and certain; that within the past ten years the waters of Kern River have flowed through the sloughs and channels running through said lands and into Tulare Lake; and that such flow of said waters to Tulare Lake has been annual, except when the waters of Kern River have been diverted into the canals higher up the river; that the said waters have flowed to and into Tulare Lake following a defined channel or channels through said swamp land, which has constituted a watercourse and regularly flowing stream through said

1048 swamp land; that the regular flow of the waters of Kern River through the channels running through said body of swamp land prior to September 28th, 1850, caused said lands to become swamp and overflowed lands, and that said lands were not caused to be swamp and overflowed by seepage and percolation.

Sixty-fourth—The evidence is insufficient to sustain or justify the finding (80):

That in August, 1878, plaintiffs began to cultivate, and thenceforth hitherto have cultivated the west half
1049 of Section ten (10), in Township thirty (30) south, Range twenty-four (24) east, Mount Diablo Base and Meridian, and since the dates of their said patents, plaintiffs have pastured their cattle over the lands described therein. But otherwise than in this finding stated, plaintiffs have not put said lands to any use, or taken or had possession thereof—in this:

It appears by the evidence that, ever since the year 1869, the plaintiffs have been in possession of all of the land in the amended complaint described, and during all that time have used said lands for pasturing cattle,
1050 and other useful purposes.

1052 ***Stipulation in Relation to Exhibits.***

In the Superior Court for the County of Kern, State of California.

CHAS. LUX ET AL.
vs.
J. B. HAGGIN ET AL.

It is hereby stipulated and agreed by and between the counsel for plaintiffs and defendant in the above entitled case, that in making up the Bill of Exceptions in this case, and also the Transcript on appeal, the
1053 following exhibits used on the trial need not be inserted in either said Bill of Exceptions or Transcript. But on the argument on motion for a new trial, and on appeal, the original exhibits shall be produced by the party introducing them, [except Exhibits marked "Map B," "Map D," "Exhibit E," and "Exhibit F," hereinafter mentioned, which being in plaintiff's possession shall be produced by plaintiff,] and may be used on said arguments:

Map of Tulare Valley, marked plaintiffs' "Map 1."

1054 Map of portion Buena Vista Slough, by McCray, marked plaintiffs' "Map 2."

Map of portion Buena Vista Slough, by McCray, marked plaintiffs' "Map 3."

Map of part of Kern County, marked plaintiffs' "Map 4."

Map of portion Buena Vista Slough, marked plaintiffs' "Map 5."

Map or diagram made by Chas. D. Gibbes, marked plaintiffs' "Map 6."

1055 All referred to on page 399 of Volume I. of this Bill of Exceptions.

Certified copies of township plats from Surveyor-General's office, marked plaintiffs' "Exhibits 7 to 19," referred to on page 353 of Volume I of this Bill of Exceptions.

Certified copies of field notes from Surveyor-General's office, marked plaintiffs' "Exhibits 20 to 28," referred to on pages 416 to 418, Volume I, of this Bill of Exceptions.

1056 Photographs taken by C. E. Watkins, marked plaintiffs' "Exhibits 29 to 37," referred to on page 580, Volume I, of this Bill of Exceptions.

Diagram made by W. R. Macmurdo, marked plaintiffs' "Exhibit 39," referred to on page 355 of Volume III, of this Bill of Exceptions.

Profile of a line through Sections 10, 9, 8 and 7, T. 29 S., R. 23 E., M. D. B. and M., marked plaintiffs' "Exhibit 41," referred to on page 22 of Volume IV of this Bill of Exceptions.

1057 Profile of a line through Sections 10, 9, 8 and 7, T. 29 S., R. 23 E., M. D. B. and M., marked plaintiffs' "Exhibit 42," referred to on page 34, Volume IV of this Bill of Exceptions.

Surveyor's steel tape or chain, marked plaintiffs' "Exhibit 100," referred to on page 166, Volume IV of this Bill of Exceptions.

Map annexed to the findings on file herein and marked "Exhibit A," referred to on page 202 of Vol-
1058 ume IV of this Bill of Exceptions.

Map of "Part of Swamp Land District, No. 121," marked defendant's "Map A" referred to on page 105, Volume I, of Bill of Exceptions.

Map of a part of Swamp Land District No. 121, marked "Map B," referred to on page 214, Volume I, of Bill of Exceptions.

Map of "Part of Swamp Land District, No. 121," marked defendant's "Map C," referred to on page 217," Volume I, of Bill of Exceptions.

1059 Map of "Part of Swamp Land District, No. 121," marked defendant's "Map D," referred to on page 397, of Volume I, of this Bill of Exceptions.

Two Sketches made by F. P. McCray, marked "Exhibits E, and F," referred to on page 385, Volume III, of this Bill of Exceptions.

"Plat showing Buena Vista Slough, between Kern Valley Water Company's head-gate and Buena Vista Lake," marked defendant's "Map H," referred to on page 41, of Volume II, of this Bill of Exceptions.

1060 Map of a portion of Kern County, showing River, Slough and Lakes, marked defendant's "Map I," referred to on page 418, Volume III, of this Bill of Exceptions.

"Map of Kern Valley Colony Lands," marked defendant's "Map J," referred to on page 419, Volume III, of this Bill of Exceptions.

Map of Kern Island Canal, marked defendant's "Map K," referred to on page 418, Volume III, of this Bill of Exceptions.

1061 Profiles made by Macmurdo and Fillebrown, marked defendant's "Exhibits L, M, N and P," referred to on page 419 of Volume III, of this Bill of Exceptions.

Record of Temperature, &c., kept by J. A. Sampson, marked defendant's "Exhibit O," referred to on page 318 of Volume III, of this Bill of Exceptions.

Old Map of part of Kern County, marked defendant's "Exhibit Q," referred to on page 419, of Volume III, of this Bill of Exceptions.

Meteorological observations taken at Visalia, marked
1062 defendant's "Exhibit R," referred to on page 419 of Volume III of this Bill of Exceptions.

Condensed Statement of meteorological observations taken at Visalia, certified to by J. C. Cochran, with Geo. H. Mendell's name written on back.

July 28th 1882.

Houghton & Houghton

1063 Att'ys for Pl'ffs.

Louis T. Haggin

Att'y for Def't.

1064 ***Certificate of Counsel and Judge of Superior Court.***

The foregoing, (consisting of 263 pages) is a portion of the Bill of Exceptions on motion for a new trial and on appeal, being Volume No. 4 of said Bill, which said Bill of Exceptions consists of four volumes, and we hereby agree and certify that the foregoing portion of said Bill of Exceptions is true and correct.

July 28th 1882.

1065

Stetson & Humphrey

Att'ys for Pl'ffs.

Louis T. Haggin

Att'y for Def't.

The foregoing is one (No. 4) of four volumes com-
1066 prising the Bill of Exceptions on motion for a new trial and on appeal, which said Bill is hereby allowed and approved as true and correct.

July 31st, 1882.

B. Brundage

Superior Judge.

The foregoing, consisting of four volumes, each
1067 signed by me, and containing respectively 596, 436, 420 and 263 pages, constitute the Bill of Exceptions on motion for a new trial and on appeal in this case, and said Bill is hereby allowed and approved as true and correct.

July 31st, 1882.

B. Brundage.

Superior Judge.

1068 *In the Superior Court of the County of Kern, State of California.*

CHARLES LUX AND AL.
vs.
JAMES B. HAGGIN AND AL.

We hereby stipulate that the Bill of Exceptions on motion for new trial and on appeal in this case may be printed in four volumes and filed in that form in the Superior Court and Supreme Court, and that when an appeal is taken in this case the Judgment Roll may be printed in a separate volume, making the Transcript
1069 on Appeal to consist of five volumes.

July 28th 1882.

Stetson & Houghton

Att'ys for Pl'ffs.

Louis T. Haggin

Att'y for Def't.

Endorsed: Filed July 31st. 1882.

Service of this volume (5) accepted by copy this 21st day of August A.D. 1882.

Louis T. Haggin

Attorney for Respondent